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BALTIMORE, JULY 21, 1910.

TOO BRIEF.

Writes the Contributing Editor in
The Outlook:

Finally, one or two fights occurred where
the surrounding circumstances were so scan-
dalous, etc.

"Surrounding circumstances" are al-
ways scandalous. Weather is never hot
enough, Theodore, to justify such ab-
breviation of the garments of the Eng-
lish language. You should have writ-
ten, "surrounding circumstances en-
vironment on all sides."

PATRIOTIC JOURNALISM.

The New York *Herald* is doing a
splendid piece of work for the country
in publishing special dispatches from
all parts of the land showing that busi-
ness conditions everywhere are sound.
A few weeks ago, under the lead of
Wall Street "bears" manipulating the
stock market, there came a spirit of
pessimism as to general business in-
terests. The *Herald*, with its usual
energy, undertook to meet this situa-
tion and to show by interviews with
many of the best-posted men in the
country that business is on safe lines,
with no reason whatever for any halt-
ing, but that, on the contrary, we should
now see a steady advance.

ENTHUSIASTIC FOR ROADS.

Wise county, Virginia, is setting a
splendid example of hearty co-operation
of citizens and officials in the cause of
highway improvement. It proposes to
spend \$700,000 in equipping itself for
progress. The county board of super-
visors has met a large number of citi-

zens at the courthouse, and out of the
gathering came a petition to the court
to order an election on September 6 on
the question of an issue of bonds and an
organization designed to enlist every in-
habitant's interest in the undertaking.
It is proposed to use the proceeds of the
sale of these thousands of dollars of
county bonds upon a system of about
112 miles of macadam roads, taking in
some of the towns and giving the county
good means of communication. The or-
ganization formed is to be a working
body designed to bring all legitimate ef-
forts to bear in promoting its excellent
aim. It will seek to have every citizen
a member of it. The attendance at the
meeting and the unanimous enthusiasm
shown promise that Wise county will be
a leader in the campaign for improved
highways in Virginia and the South
generally.

INDUSTRIAL RICHMOND.

About the time when the MANUFAC-
TURERS' RECORD was developing for its
last week's issue the suggestion of the
use at the place of production of coal,
of oil or of natural gas in the develop-
ment of electric energy, to be distributed
for the use of industries of many kinds,
plans were making in Richmond for the
carrying out of that very idea at the
Midlothian mines, in Chesterfield
county. These mines are in the field
where the first bituminous coal was
mined in this country more than a cen-
tury ago. They lie within twelve or
fourteen miles of Richmond, and the
company which has been organized by
Richmond and New York interests pro-
poses to establish close to the mouth of
the mines a power-house for the genera-
tion of electricity to be transmitted to
Richmond, Petersburg, Norfolk and
other points. The purpose of the com-
pany is to sell power to manufacturing
plants, and, in that connection, it is
stated that such is the growth of manu-
facturing in and around Richmond that
there will soon be in that city a demand
for three or four times as much electric
power as is now available.

The most casual observer, only pass-
ing through Richmond on a railroad,
cannot fail to be impressed, not only by
the evidences of a wonderful indus-
trial expansion in and near the city
during the past ten years, but by the
indications on many sides of the sound-
ness of the arguments that have led to
the new enterprise at Midlothian. For
a while in the fourth quarter of the last
century the tobacco and iron industries
led in manufacturing in Richmond. But
right among the ruins of the fire of 1865
a number of small industries began life,
and in the past twenty-five years have
become leaders of their kind. Tobacco
factories and iron foundries have in-
creased their power, but, beginning al-
most as adjuncts to them, many other
plants have risen to greatness, notably
the cedar works, the greatest in the
country. If not in the world, and the
locomotive works, now a branch of the
American Locomotive Co. But there

are others. Richmond is the home city
of one of the great fertilizer corpora-
tions of the country; it is one of the
greatest distributors of shoes, and its
meat-juice factory has made necessary
a pioneer cold-storage plant and was
largely responsible for the establish-
ment in that city of a cattle market.
The immense water-power of the falls
of the James, once almost monopolized
by great flouring mills, that sent their
product to Latin-American countries,
has been chained for the development
of electricity for traction purposes, for
lighting and for industrial power, and
yet an immense amount of power still
seems to be running to waste among the
rocks.

But all this power, as well as such
power as that to be generated at the
Midlothian coal mines, will be needed
if Richmond maintains the pace of the
past ten years. Every year shows new
smokestacks or new power-plants where
a short while before were old fields on
the outskirts of the city, now brought
within the limits by annexation; local-
ities in the heart of the city once the
sites of old homesteads have become
bustling business centers, and for five
or six miles beyond the built-up sec-
tions development of handsome suburbs
is under way.

Cheapness seems to be the exception
in this new home-building, and though
many of the younger industries are
small, they all seem to be flourishing
and growing and, thereby, carrying
Richmond through that healthy indus-
trial development which has character-
ized the wonderful growth of New Eng-
land, a development which does not
make a city's life dependent upon the
life of half a dozen large manufactur-
ing undertakings, but which is conse-
quent upon the building up of many
varied industries. Richmond has grown
rich, and is growing richer. Its mercan-
tile and financial life is sturdy, but the
city is growing because it is manufactur-
ing things to sell. The pending cen-
sus should make for Richmond, aside
from the advantages accruing through
recent annexation, an exhibit gratify-
ing to every student of Southern ad-
vancement.

A HOOKWORM AUTHORITY?

"Dr. Rose is the leading authority on
hookworm disease," says the *Montgom-
ery Advertiser* in perfect good faith, we
are sure.

It refers to Wickliffe Rose, otherwise
described as secretary of the Rockefeller
Hookworm Commission, executive sec-
retary of the so-called "Conference for
Education in the South," the popular-
izing agent of the Rockefeller General
Education Board, and general agent of
the Peabody Board. He has just been
elected head of the Peabody College for
Teachers at Nashville. If any other
jobs have come his way in the past five
or six years they have been forgotten by
us. We are anxious to learn, however,
what medical school graduated "Dr."
Rose, and whether that school has been

granted the right to live by the Carnegie
Professorial Pension Board.

CONSERVATION.

President Taft, on the recommendation of
Secretary Baillinger, has withdrawn from
entry 73,270,771 acres of the public domain.
Not a bad record for "enemies of conserva-
tion."—*The Tribune*.

A Washington dispatch says that "the sale
price of the coal land was fixed at \$80,605,666.
The minimum price fixed by the law for the
same land is \$14,300,923."

Now, what may be deduced as to the effect
of conservation upon the price of coal? In
some States there have been wailings over a
royalty tax on minerals because consumers
of coal found the tax added to the market
price. Nobody ever opposed conservation in
theory. In practice it seems to mean depriv-
ing ourselves for our posterity, for whom we
are doing more than posterity ever can do
for us. If conservation is ever to be truly
popular it must in some manner operate
toward cheapness. Instead of marking prices
up to the wholesaler, it must provide for
marking down prices to the consumer. The
popularity of conservation arises in good
part from the belief that natural resources
benefit the few rather than the many. The
demand for conservation may be expected to
wane with the discovery that making coal
dearer to the wholesaler means making it
still dearer to the consumer. The friends of
conservation need to think more of the ulti-
mate consumer and less of the villains who
are selling coal cheaper now than they will
as conservation of this sort gains headway.—
New York Times.

The *Times* is quite correct. The non-
utilization of natural resources, whether
brought about by governmental control
or otherwise, means increasing the
price to the present generation for the
benefit, or at least the supposed bene-
fit, of future generations. Every acre
of coal land withdrawn by the Govern-
ment from the market, and thus from
competitive development with privately-
owned properties, enhances the value of
coal lands in the hands of private
ownership, whether individual or cor-
porate. Every acre of timber land with-
drawn from the market by the Govern-
ment enhances the value of timber lands
owned by private individuals, and, of
course, both coal and timber will neces-
sarily advance in selling price, to the
loss of the consumer, under such condi-
tions.

No better scheme for the enhance-
ment in the value of mineral and tim-
ber properties owned by individuals or
corporations, or for bringing about
higher prices for coal and timber, could
have been devised than the conserva-
tion efforts which have thus far re-
sulted in withdrawing vast tracts of
coal and timber lands from develop-
ment and halting the utilization of
water-powers. The non-utilization of
water-powers increases the demand for
coal, and thus enhances its price, while
strengthening the ownership of water-
powers already developed. It is not to
be supposed for a moment that the men
who have carried on this great cam-
paign of conservation have done so with
any thought of increasing the wealth
of the owners of coal and timber lands
at the expense of the consumer, but that
is one of the inevitable results.

Some phases of conservation work

are interesting and to be commended. Some of them are absurd to the extreme, and are playing into the hands of corporations and landowners rather than proving beneficial to the public. Some narrow-minded people might even suspect that many corporations had been interested in helping on the agitation in favor of conservation, for the more land that the Government can be induced to withdraw from public use, the greater is the power of those who own mineral lands and timber lands, whether they are now being developed or whether they are being held for the "unearned increment."

Of all the farces of these latter days, when farces are the rule, and when the public is being played for a sucker and ever biting freely, conservation as it has been preached is one of the most pronounced. In saying this the MANUFACTURERS' RECORD does not for a moment suggest that there are not some kinds of conservation that are immensely valuable to the country. The betterment of our soils is one form of conservation worthy of constant emphasis, but the conservation of soils and the restoration of soils have been going on steadily for the last fifteen or twenty years under the leadership of scientific agricultural development by the agricultural colleges of the country. Scientific forestry is a phase of conservation that is very important, but progress was being made in that long before the conservation faddists of the country rode into public favor by this cry.

The conservation of coal is going on, as it has been going on for years, by more scientific methods of coal-mining, coal-burning and the utilization of waste gases. The conservation faddists had nothing to do with this. The scientists, the engineers and the chemists connected with great mining and manufacturing enterprises have been leading the way in this direction for many years.

Wherever there are such vast resources as are possessed by this country, it is wise that they should be developed and utilized. It is wise that there should be the widest possible competition in the development of these resources. Every movement made by the Government to lessen the amount of mineral or timber lands open for public use or for development purposes, while temporarily conserving the particular property withdrawn, necessarily results in throwing the consumptive demand upon the properties under development, and thus enhancing their value and increasing the cost. The public—"it pays the freight."

OPPORTUNITY FOR A LEGISLATOR.

Mr. Hill, the well-known railroad man, familiarly called "Jim," is quoted as saying in the course of an interview upon the business outlook: "They seem to think that legislation will cure anything. At this rate it won't be long before they will say it can cure a broken leg."

The chairman of the Great Northern is rather belated in reaching this conclusion. Lawmaking for the cure of "lame ducks" has long been a popular remedy, although it does not always effect a cure.

But there is one important evil to which Mr. Hill's words direct attention, namely, the volume of legislation which should never have been enacted. The country is being legislated to death, or at least until it is sick. The primary

idea that caused the establishment of fixed times for legislative bodies to meet was for the purpose of affording the people frequent opportunity to obtain relief from evils which might be corrected by law. Now, it would be quite in season for them to cry out for protection against the doings of their legislatures. Almost any legislative body evidences the truth of this.

Generally speaking, the aim of each member of a legislative body, whether town or City Council, State Legislature or Congress itself, is to get some law passed to which his name shall be attached. The result of this foolish ambition we see in the bulk of nonsense which somehow gets through, considerable of it happily to be throttled by the wisdom of executives, that unfortunately does not always claim as many victims as it should. Yet if any legislator desires to attain real, unique and lasting fame, let him concentrate his energies upon an effort to remove from the statute-books all superfluous laws, including, of course, each that has become a dead letter through having outlived its usefulness. In addition to this work he might co-operate with others to prevent the enactment of needless laws, bills for which are constantly appearing over night like weeds in a garden.

While the judicious work of a conscientious member along the lines here described might not meet unqualified approval from folk like James J. Hill, who has his own ideas as to what should be on the statute-books, particularly with reference to transportation, it would merit hearty praise from the public generally, which has tired of multifarious laws and the confusion resulting therefrom. At any rate, "Jim" says: "If they will only leave us alone everything will be all right."

Maybe there is a whole lot of truth in that pithy sentence.

FARMING NEAR CITIES.

In commendation of the "farm movement" for the Birmingham District, Mr. M. V. Richards, land and industrial agent of the Southern Railway, writes to President A. H. Ford of the Birmingham Chamber of Commerce telling something of his own experience and suggesting how the plan may develop. He says that within the past few weeks a colony of foreign-born people who have lived in Pennsylvania for several years have purchased farms on the Southern Railway about 20 miles north of Mobile, where it is expected there will be a settlement of from 150 to 200 farmers. Along the line between Richmond and Danville, Va., about 150 German families have settled during the past 10 years, most of them coming from the North, and some directly from Germany. Mr. Richards sees many favorable opportunities for farmers in the territory adjacent to Birmingham, and he suggests:

Interest the owners of lands suitable for farming purposes, situated near transportation facilities, in the subdivision and sale of their holdings. The farms should be subdivided into practical-size places and offered for sale at reasonable prices and upon easy terms to bona-fide settlers. A careful study of the merits and possibilities of the land should be made before being offered to the public. Plats showing the subdivisions and carefully prepared descriptions of the soil, its capabilities, cost of improvements necessary, the price of building material, the price of farm equipment, information regarding crops and markets should be included in the prospectus. These offerings should be advertised, and it would be well to interest agencies handling such properties in selling to the class of people it is desired to reach. We probably may be in position to place the

information regarding the properties when ready for sale before agents or colonizers handling foreigners. It seems to me you will meet with the best success in interesting people in the properties by placing the facts before people formerly from Europe, especially farmers now located in the congested centers, such as Chicago, New York, Buffalo, Boston and Philadelphia. Heretofore the movement of these people has largely been to the Central West and the West for the reason that they found people of their own nationality in those sections. After these people are located on lands in your section it can be expected that immigrants direct from Europe will be attracted to these settlements, and in time the movement of foreign immigration to the South will be fully as great as it is now to the West, Northwest and Southwest.

These suggestions are the more practical because they come from a man who has had many years' experience in attracting settlers to several States in the South. His emphasis of the detail work necessary to make a success of the Birmingham movement is timely, and should be given all the consideration that it deserves. It may be suggested, however, that great care should be exercised in looking to the congested centers of this country for farm material. If there are farmers in such centers who desire to resume the country life they had in their native lands, and are qualified to become good citizens of Alabama, it would be well to give them attention. The MANUFACTURERS' RECORD, though, has for several years been warning the South against giving encouragement to plans turning upon the relief of congestion in certain Eastern cities, or to immigration schemes likely to induce similar congestion in Southern cities. Bearing upon that warning is the following from the *Times* of Washington, D. C.:

The doors of the United States were practically closed today against Russian-Hebrew immigrants coming to this country in response to promises made by agents of American Jewish aid societies, when the Department of Commerce and Labor announced that they would be barred under the contract-labor laws.

It is alleged that the aid organizations, which were originally designed to divert Jewish immigrants to the sparsely-settled sections of the country and away from the Eastern cities, have developed until they in reality are labor bureaus, and conduct extensive advertising campaigns in Russia.

The decision was made in connection with the application of 280 Russian Hebrews to enter the United States at Galveston, Texas. All but 34 were admitted, those excluded being barred on the ground that they were destitute and would become public charges. It was announced, however, that the contract-labor law would be applied to all such cases.

The MANUFACTURERS' RECORD is convinced that one of the greatest drawbacks upon this country today is the provision against alien contract labor. It believes that the regulation in that particular should be so modified as to permit representatives of State Governments to seek in foreign lands desirable additions to the labor supply of the States, the desirability implying that the newcomers shall not be likely to become at any time a burden upon the country. But the MANUFACTURERS' RECORD is just as strongly in favor of the prevention of immigration under such auspices as those which are referred to in the *Washington Times*. It believes that about the greatest evil that can happen to the South would be extensive immigration there upon racial or religious lines. The settlers who will benefit the South and who will be benefited by the South are those who come upon an individual or a family basis prepared to become parts of the communities in which their lot may be cast, and not massed in an alien atmosphere

and under the guidance of alien influences.

Men interested in attracting desirable settlers should take a hint from the report that the tide of migration from the Northwest to the virgin fields of Western Canada is turning back to this country. The great mass of migrants have been wheat-growers able to sell their lands in this country and to buy new farms in Canada at a much lower price. They have apparently found that cheap lands, after all, are not everything to be considered in selecting new homes. Representatives of the South should get busy in the Northwest, and even in Canada, and show homeseekers that the South possesses every attraction that Canada offers, and much more besides.

COURTESY.

Mr. V. J. Albert, manager of the Postal Telegraph-Cable Co. of Baltimore, in referring to a recent editorial in the MANUFACTURERS' RECORD commending a printed card hanging in the office of the Postal Company in Atlanta urging upon employees the utmost courtesy to the public, says:

It is my opinion that more expressions of this sort made public would have a highly beneficial effect. As a usual thing courteous treatment is appreciated, but easily forgotten, and the employee who starts out to be courteous finds that it is no easy matter to keep his equilibrium when fully 80 per cent. of the public directs anything but a friendly attitude towards him.

This is another side to the question of courtesy between corporations and the public, and Mr. Albert is quite correct in his statement of the case. It is true that a great many people are not courteous to the employees of public corporations. Very many individuals on the street cars as well as on the steam railroads, very many people dealing with corporations of all kinds, expect courtesy from the employees, but fail to help to create courtesy by being courteous themselves. There is, indeed, a woful lack of courtesy in many places by many people. It ought to be remembered that courtesy begets courtesy, brusqueness begets brusqueness, anger begets anger. It is not always that the courteous man receives courteous attention; nevertheless, it is just as incumbent upon the public to be courteous to the clerk in the business or in the railroad, or to other employees with whom one comes in contact, as it is upon them to be courteous to the public. "A soft answer turneth away wrath." A smile begets a smile. Someone has said: Smile awhile; And while you smile another smiles, And soon there's miles and miles of smiles And life's worth while because you smile.

BUSINESS MEN AND JURIES.

When courts of the country come to be controlled by habits essential to success in ordinary business undertakings, reluctance of men of affairs to serve on juries may be expected to diminish. In different parts of the country there is almost a perennial discussion of the question of jury reform turning largely upon the character of the men selected for jury service and the increasing tendency toward deterioration in that respect. The discussion promises little practical benefit, because it is monopolized by the class of men directly responsible for the degeneration of juries—the class that has been trained to the law. Their life is at the antipodes of business. Consumption of time is of more importance to them than the economic use of time. With the average

lawyer time is money only in the sense that the more time he can consume the greater his importance and larger the prospect of his fee. The productions of his pen call for three or four times as many words as are necessary to the sense of the thought that would be conveyed. Naturally the routine of courts, controlled by lawyers, either those still in active practice or those elevated to the bench, is lacking in the essentials of business. Where the minimum of working hours in a business house is nine hours, four hours is the maximum of the working time of the courts, as a general rule, and more time is wasted within those four hours than a business house can afford to waste within a week. Again, the courts being an important element in the political machinery of the country, are compelled to carry from two to three times as many employees as are required to do their work, and consequently additional waste of time and money is positively guaranteed.

When a business man is "caught on a jury"—for that is the thought of the situation that has rather logically come to describe it—he is usually, after one experience, willing to resort to any legitimate device that may enable him to escape the service thereafter. In the first place, partly because of politics, the reasons for exemption from jury service have been so multiplied that, on the one hand, a large proportion of men still liable to the service constitute the large proportion of the men who are already bearing the other civic burden—that of taxation; and, on the other hand, many of them are of a class hardly qualified to be entrusted with the important duty of juror. One result of this is that in many cases the jury is a fair embodiment of the lack of intelligence in the community. Even when an intelligent twelve happen to form a jury, its members are affronted by being obliged to submit to appeals from attorneys-at-law, not to intelligence, but to any other quality. Because they were once lawyers, judges seem to forget that a trial ought to be the opportunity for a bringing out, clear and distinct as possible, all the facts bearing upon the case in strict accord with the principles of law. Too many judges permit their courts to be in contempt by allowing the proceedings to take the direction of obscuring or confusing the facts in a case under the dominance of shysterism and chicanery, none the less outrageous because perpetrated adroitly by lawyers commanding enormous fees and of "high standing" at the bar.

The natural instincts of the average American citizen is to perform cheerfully every civic duty, provided it is reasonably imposed. Tax-dodging is widespread, because administration of the taxing machinery is too frequently in the hands of incompetents; because tax-spending is either ignorantly wasteful or deliberately generous, or because tax officials incline to hold property-owners as common thieves. So, evasion of jury service rests fundamentally upon too frequent calls upon the same persons and upon indignation at the travesties upon the administration of the law prevailing in the conduct of most courts.

Improvement in the jury service could be speedily brought about if judges and lawyers should be eliminated from participation in the discussion, and if in every community a hundred business men who have served on juries should be permitted to formulate from their

experience a plan for the conduct of the courts and such a plan be adopted.

IN TOUCH WITH BUSINESS.

C. W. Rainey of the National Showcase Co., Columbus, Ga., writes to the **MANUFACTURERS' RECORD**:

Your paper is all to the good, and we get quite a nice lot of business out of it. It puts us in touch with all new buildings all over the Southern States, and we are thereby enabled to get in touch with prospective customers who would probably never hear of our concern and of whom we would never hear, and we have closed up many a nice good order simply by using the information contained in your valuable paper. We closed a \$7000 deal for fixtures about six months ago and got the information out of your paper; so you will see that we think quite a good deal of you.

THINK IT OVER.

A small pamphlet about Byromville, Ga., issued by "The Byrom Corporation," concludes with the following statement:

If you can't get independent in the South, Dixie will feed and clothe you, for it is not your fault that you were born that way.

This is about as delicate a way of suggesting to those who cannot make a success in Dixie that they are mentally incompetent, and, therefore, to be taken care of by the State, as we have ever seen.

WHO?

It is announced at New Orleans that "the New York Industrial Removal Office, which in a large measure is the national immigration commission of this country, has joined hands with the New Orleans Progressive Union and the Louisiana State Board of Agriculture and Immigration, and will aid this State in an effort to divert a desirable class of immigrants to come to Louisiana." Who compose the New York Industrial Removal Office, and under what authority is that rather new factor in New York philanthropy constituted "the national immigration commission of this country" in large measure?

THE COTTON MOVEMENT.

In his report for July 15 Col. Henry G. Hester, secretary of the New Orleans Cotton Exchange, shows that the amount of cotton brought into sight during 318 days of the present season was 10,181,407 bales, a decrease under the same period last year of 3,251,056 bales. The exports, less 52,873 bales returned from abroad, were 5,883,261 bales, a decrease of 2,373,887 bales. The takings were, by Northern spinners, 2,019,826 bales, a decrease of 650,038 bales; by Southern spinners 2,210,628 bales, a decrease of 139,308 bales.

BY THE FORELOCK.

Right here and now is the time to protest against any moving-picture exhibitions of the fight for the presidency of the Daughters of the American Revolution.

The North Carolina Geological and Economic Survey, Dr. Joseph Hyde Pratt, State Geologist, has issued Bulletin No. 18, containing a bibliography of North Carolina geology, mineralogy and geography, by Dr. Francis Baker Laney and Katharine Hill Wood. In the preparation of this bibliography more than 200 periodicals were examined, and more than a dozen of the public and private libraries of the country. Nearly 100 pages of the 400-page publication are devoted to a list of maps of North Carolina.

The Retail Hardware Association of the Carolinas has elected Messrs. W. H. Smith, Gaffney, S. C., president; A. L. Phipps, Durham, N. C.; M. Bonnoitt, Darlington, S. C., and Otis Green, Asheville, N. C., vice-presidents, and T. W. Dixon, Charlotte, N. C., secretary and treasurer.

KENTUCKY'S OOLITIC LIMESTONE.

[Special Correspondence **Manufacturers' Record**.]

Bowling Green, Ky., July 14.

Bowling Green oolitic limestone, which is second to none in the United States, is found in Warren county, Kentucky, and lies on both sides of the 37th parallel, north latitude, and between the 86th and 87th degrees west from Greenwich. Geologically it is found in the upper beds of the St. Louis limestone, about 50 feet below the Chester sandstone, which latter lies immediately under the great coal measures. It is a perfect limestone, for it analyzes as follows: Carbamate of lime, 95.31 per cent.; carbonate of magnesia, 1.12 per cent.; silica, 1.42 per cent.; iron and alumina, .39 per cent.; water and loss, 1.76 per cent.; total, 100 per cent. Its structure, resembling the roe of a fish, gives it its name, oolitic, stone eggs. It very closely resembles the world-famous Portland stone of England, from which the more celebrated Portland cement gets its name. St. Paul's, London, as well as many historic buildings of Great Britain which have stood for ages, are built of this stone, and attest its beauty of texture as well as its ability to withstand the elements.

The first essential in a building stone is durability, then strength, ease of working, beauty of appearance, uniformity of texture, resistance to discoloration as well as to the action of fire and water.

This great deposit, which averages 12 feet in thickness and sometimes exceeds 24 feet without a seam, has a continuous outcrop in Warren county of 120 miles. There are more than 1,000,000,000 feet in sight, with less than three feet of stripping. All of this outcrop lies within a distance of two miles from the waters of Barren and Gasper rivers and the railroads that now exist and those that will be constructed in the very near future. The number of cubic feet per acre runs from 500,000 to 1,000,000, as it ranges in thickness from 12 to 24 feet. The topography of the region is such that much of the stone can be quarried with comparatively little stripping. Its natural texture, which is quite soft, no grit, renders it very easily worked. The channeler goes through it rapidly; it is quickly split in blocks of any desired thickness, and its cost on the cars or barges is very small compared with the average building, dimension and mill blocks. It sells in all the markets of this country alongside its competitors for 10 or 15 cents per foot higher. Lack of transportation facilities in the past has been the only element that has kept it from being seen wherever durable and handsome buildings are wont to be seen. This condition will soon be a thing of the past. Strong influences are at work which will supply transportation facilities second to no stone region, and the markets of all the large cities will find that it will supply at least 50 per cent. of their wants. The quality and the quantity are here. It has been in actual use in this locality for more than three-quarters of a century, and the first structure shows the material in perfect condition, much whiter than when it left the quarry, with the tool marks as plainly seen as if they were made yesterday. There are some 10 quarries more or less developed, four of them in flourishing condition; the others are rapidly coming to the front, and the confident expectation is that in less than five years there will be more than 100 doing business by the million or more feet per year and supplying thousands of persons with continuous work.

This stone has been shown at all of the exhibitions since 1876, where it has always received awards, the latest being the Tercentenary of Jamestown. It has been again and again subjected to the most

searching practical and scientific investigations and experiments by experts, both State and National, and the results have been uniformly favorable. As mentioned above, it has stood that severest of all tests, time, and exposure to the arctic blasts, the torrential heat and the intermediate freezings and thawings. It has been placed in contact with every species of mortar and cement, and held its own as to color. Exposure to such blasts of wind and weather as mortuary work compels has made it an aggressive rival of Southern and Eastern granites and marbles.

At the World's Fair, Chicago, 1893, samples of this stone were tested by Major J. M. Reilly, ordnance department, United States Army, with the following results: (1) Cube, 4 inches; area, 16.12 square inches; first crack, 105,300 pounds; per square inch, 6532 pounds. (2) Cube, 4 inches; area, 16.12 square inches; first crack, 112,980 pounds; per square inch, 7009 pounds. (3) Cube, 4 inches; area, 16.08 square inches; first crack, 108,480 pounds; per square inch, 6746 pounds. This shows a strength far in excess of any weight that you would reasonably expect to be imposed on any building stone of modern architecture, and much greater than that of the very best brick masonry.

It is perfectly safe to say that there is no stone in any part of the United States that can be quarried, sawed and dressed with greater ease and satisfaction than this very superior oolite. It responds readily to the chisel, and its almost perfect uniformity of structure, together with its absolute freedom from silica, admits of the finest and most delicate character of carving, as can be so readily seen in the splendid Corinthian capitals that surmount the immense columns which support the portico of the Warren county courthouse, which was erected something like half a century ago. It splits with wedges readily, not only in one, but in many directions, so that, to use the language of an expert, "a curved surface of 100 degrees can be split without risk of the line of curvature crossing the curve."

It is rare that stone as far north as latitude 37 can be quarried every day in the year, but such is only another of the many excellent features of this rarely superior stone. It is quarried, it is worked, it is cut and set equally well in winter as in summer, without the least danger of scaling from frost. There are economic reasons why this is not always done, but when necessity requires it is often done without danger of either cracking or scaling. It may be readily seen what an advantage the fortunate contractor may thus have over his less favored competitor, who may be forced to use some inferior stone similar to that which is found in portions of neighboring States—Indiana, for instance.

The various cement mortars which must frequently be used in buildings and other structures are fertile sources of most unattractive looking stains, particularly when a white or even light-colored stone is used. The close texture of this stone and its freedom from magnesium compounds renders it proof against such staining.

When ordinary stone comes in contact with the earth, as in the case of foundations for buildings, bridges and mortuary work, the contact usually results in a decided discoloration. This stone escapes this to a very great extent, perhaps less than almost any limestone known in this country. For this reason it has no competitor when used for foundations, curbing, coping and bases for monuments and all work of this nature.

It has been repeatedly tested in the so-

verest manner in the many cities in which it is found, by the alternate action of fire and water. Architects demand a stone that will not crack or scale by such action, which at the same time carries the other necessary qualities of a good stone. This stone has been subjected to repeated tests in this direction, both in burning buildings and from the result of experiments in heating a sample red hot and immediately plunging it in water, and such tests have shown that it possesses fire-resisting qualities in a pre-eminent degree.

Several of the more fully developed quarries are of large extent, and practically inexhaustible. They have a very fair equipment, composed of units that may be indefinitely increased as the rapidly-increasing demand for the stone will require in the near future. This equipment consists of the latest forms and make of steam drills, derricks, channelers, hoists, gangs of saws in sets of 10 or more, planers, jointers, together with cutting sheds for finishing, etc. While the capacity of all the combined quarries is greatly below the present demand, it is constantly and steadily increasing, and when the quarries are numbered by the hundred the capacity will be made practically unlimited. The proper facility for transportation is the one thing needful, and this is apparently in sight, certainly from one and possibly from three different sources.

The stone can be had in the form of mill blocks, rough or scabbled, scabbled bases for monumental purposes, sawed on two, four or six sides, bridge masonry, together with cut stone for buildings. While the present capacity of all the quarries is perhaps limited to less than 10 cars per day, the time is near at hand when this will be more than quadrupled, for the stone actually in sight will supply 100 cars per day for 2500 days.

The shipping weight for the thoroughly dried stone, exactly cut, is 155 pounds per cubic foot. The approximate weight for mill blocks, scabbled bases, sawed stone and cut stone varies from 155 to 185 feet. Mr. W. S. Day of the United States Geologic Survey, said in his report for 1889-90:

"The product of Warren county, Kentucky, is deserving of special notice because of its peculiarities and its value as a building stone. The stone is known commercially as Bowling Green oolite. It is quite different from the oolitic stone of Indiana, inasmuch as it belongs to another limestone group, the constituent globules being large and distinct, whereas in most of the Indiana stones they are minute. It is quite similar to the Portland oolite of Ireland [he means England].

"The following analyses of Bowling Green and Portland oolite shows the similarity between the two:

	Bowling Green. Per ct.	Portland. Per ct.
Carbonate of lime, CaCO_3	95.31	95.16
Carbonate of magnesia—		
MgCO_3	1.12	1.20
Silica— SiO_2	1.42	1.20
Iron and alumina—		
Fe_2O_339	.50
Water and loss.....	1.76	1.94
	100.00	100.00

"The quarries are of large extent, well equipped with channeling machines, derricks, etc. A mill of 12 gangs of saws finishes the stone. Blocks of any size can be furnished. The stone is soft and easily worked, hardens on exposure to the atmosphere. Carvings made upon it stand well. Its color under the influence of sunlight tends to become continually lighter. When heated to redness on the surface and plunged into cold water it revealed no crack, even upon examination with a magnifying glass, and in some cases on being reheated for a second and third time and plunged into water still failed to present any indications of cracking. According to present indications the extended applica-



A \$600,000 MERCANTILE BUILDING FOR DALLAS, TEXAS.

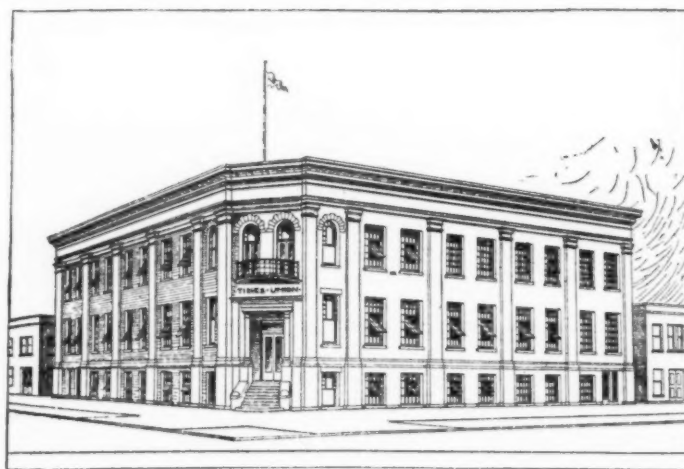
It will be erected by Butler Bros. of Chicago; structure will be eight stories high, 165 feet by 317 feet 7 inches; fire-proof construction; reinforced concrete frame; architects, Mauran & Russell of St. Louis; contractor, Selden-Breck Construction Co., St. Louis.

tion of this stone in the northern and eastern portions of the country seems highly probable."

Major Arnold, ordnance department, United States Army, former commandant Columbia Arsenal, in his report to the chief of ordnance, United States Army, says:

"A personal examination showed the quarries near Bowling Green, Ky., to be extensive, well equipped with channeling machines, steam derricks, travelers, etc., and a mill with 12 gangs of saws. Blocks of any size can be furnished to order; the capacity is ample. The stone is an oolitic limestone of a light grayish color; has an established reputation for its durability and ease of working, and resisting the action of the atmosphere of cities. Generally the stone at the quarry appeared to be very uniform in color and texture, and in every way desirable for building purposes."

There is nothing wrong with the quality or quantity of the stone; all that is needed are more quarries. Instead of a dozen quarries working on a comparatively small scale, there should be 100 opened up and running on a very large scale, with an output of many cars per day. Many representatives of large contracting firms from distant cities, both North and South, have recently visited these quarries, and they have invariably expressed themselves as satisfied. Within a week the largest and best-known firm of church architects in the United States has sent its representative here for a thorough investigation as to the quantity of stone and the facilities for supplying it. This representative was so well pleased that it is said his firm will write Bowling Green whiteness in all of its future specifications. The writer has recently seen an order for more than 100,000 cubic feet of Bowling Green whiteness for St. Thomas' Church, now being erected in the city of New York, and more than 500 cars will be needed from these quarries. There is only one thing needful, and



FLORIDA TIMES-UNION BUILDING, JACKSONVILLE.

Contract awarded in June; 90x100-foot structure; fireproof; reinforced concrete, pressed brick and metal window sash; steam heat; electric and gas lighting; electric elevator; cost \$50,000; architect, J. H. W. Hawkins, Jacksonville; contractors, Lightman, McDonald & Co., Nashville, Tenn.

that is, more and better railroad facilities for getting this very wonderful building material to market. This deficiency will be supplied within the coming year.

A small list of the numerous buildings constructed wholly or in part of the Bowling Green white limestone include New York Cotton Exchange, St. Thomas' Episcopal Church, being erected, 500 cars; the Dime Savings Bank, the Hall of Records; Carmi, Ill., county courthouse, postoffice building; Evansville, Ind., 24 public and private buildings and residences; Philadelphia, Betz Building and \$250,000 residence of Mr. Alfred Burke; Washington, D. C., \$200,000 residence of Mr. A. M. Lothrop; many custom-houses, postoffice buildings, United States courthouses, from Pensacola to the Lakes on the north, and many public and private buildings in Nashville, Louisville, St. Louis, Atlanta, Memphis, etc.

This stone will stand stripping to the

extent of its thickness. All of this may be made of commercial value, and will thus pay for itself in the shape of flux for iron furnaces, metal for railroads and county highways, ballast, etc. The softer portion resulting from the cutting and working of the finished product is readily reduced to impalpable powder by means of stone mills that grind by attrition, and thus become the sovereign remedy for clover-sick lands, so long the bane of the otherwise successful farmer. This pulverized limestone should reach the farm at a cost of \$1 to \$1.50 per ton, and every acre of land in the Mississippi Valley, if not in the entire United States, would be benefited materially by the application of one ton of this powdered limestone. If lime is demanded it can be as readily produced, for the prospective railroads will supply steam coal to the quarries for less than 75 cents a ton.

Sanford and Its Flowing Wells in Agriculture.

By C. O. McLAUGHLIN.

[Written for the Manufacturers' Record.]

Celery had not put on short dresses in 1906. It was still in the long garments of the infant, being pushed around the flowing well area of Sanford by a poorly-paid nurse.

Opportunity for the development of the resources of a location, like investments of merit, suffer while the pioneer of small means is endeavoring to show capital the way to profitable investment. Every man and all men who discover great opportunities do not have smooth paths to tread. Those who discovered this great continent on which we live had some experience; they were turned down by the "folks at home."

A friend of mine, we'll call him "Old

us of the wonderful climate, explained the reasons for the non-existence of biting cold and told us if we would give him \$10 each per month for five months he would get property for our account that would bring riches in a few years. As is so often the case, we discounted the value of our friend. But if a stranger had come along we would have weighed his marvelous story until late in the night. Many people have grown rich since that summer day in the place we refused to risk; no, not risk, but invest \$50, and planters of celery, lettuce, cabbage, cucumbers, potatoes, eggplants and other vegetables are today making more than salaried men having what they con-

ous. The transformation is wonderful, and we are truthful when we tell our neighbors in other States that we are just being discovered.

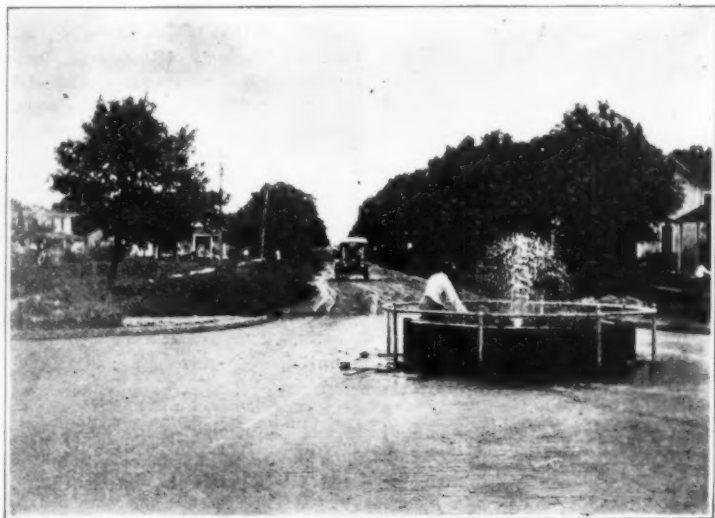
This is not a story prepared to trap the unwary in distant parts of this great continent, nor is it the tangling meshes of a cast net to drag confiding nearby neighbors away from happy homes. The people are here to show what they have done and what they are now doing; anybody may see. Sanford and vicinity is ready to deliver the goods to the doubtful. If you are a doubter, come and see for yourself, investigate for yourself. Sanford is an impartial witness, and you may take the witness at your convenience.

There is a chance in this country of ours for those who are willing, except the idle; they have no chance anywhere. Practical demonstration has proved that uncommon

on one of the magnificent steamers of the Clyde Line will bring you abreast the landing of the home of the great flowing wells, where the climate is of a character that will permit man to live and work 365 days each year if he wants to. You will find the swarthy pioneer resting on his laurels and living on his income. You will find the busy man from the East, the West, the North, and even from the South. You will see a city any American citizen has a right to be proud of.

Men who had only a small salary a few years ago are now independent, and that reminds me of a man who five years ago made a living pulling a bell line over a freight train. He is now a director in a bank, and don't have to work. When he works it is because he is afraid idleness will make him old. Another case comes up. In March of this year, while talking

TYPICAL VIEWS OF SANFORD FARM DEVELOPMENT.



ONE OF THE FLOWING WELLS.



A CHICKEN FARM.



CELERY FARM, LAKE MUNROE.



GATHERING AND PACKING CELERY.

Walter" for convenience, was a seer, but we didn't know it. If some plausible faker with gold-mine stock had held the boys in the office up with a long line of good talk, maybe we would have bought some stock in a mine we could not hope to see; in fact, some of us did that very thing. Walter lounged around the office one day, I think it was along about 1901. He had been living in Florida some time. He was the most enthusiastic talker about the possibilities of the Sanford district that any of us had heard. He told a story and pictured a future that was too good to be true. A few years have brought about things even he never dreamed of. We pulled out the map of Florida and watched him make pencil marks showing where the great artesian wells would flow forever. He made brackets around a central part of the State and told

sider good office positions ever will be able to make, unless they become general officers, and it is not possible for that to happen, even though the price of land here is greater than it was a few years ago.

Men of absolutely no experience have become rich, and the same kind of men are making money today.

I have been in Orange county and in Lake county in this State since 1906; have traveled over and carefully investigated nearly all parts of this great State south of Jacksonville. The conditions existing when I made by home here are quite clear, and the conditions of today are before all who will give them attention. What the State produced a few years ago and what it produces now is a matter of record. It is not ancient history, but practically current information. The change is marvel-

opportunities are offered in this particularly favored section.

Many years ago, to some of us; within the memory, perhaps, of many, the bones of our countrymen bleached on the hot sands of the great American desert, in the trails to the gold fields of the far West the souls of the intrepid American had passed to that haven of rest where gold and worldly goods have no value. Time, as usual, has made many changes. The same spirit that led them over the plains caused later generations to build railroads and improve other methods of transportation so that now our people may come and see what they are told actually exists, and do so without discomfort or danger. The train will stop at the "Celery City" in a few hours after leaving Jacksonville, or less than 24 hours up the St. John's River

to a friend I asked him what he expected to get out of his eggplants. He said: "There are 4000 plants in that piece of ground, and I expect to get \$4000 out of the lot." A few days ago he told me that the income was about \$3500. These are not isolated cases.

Some idea of the growth of Sanford during the past four years may be interesting. In the spring of 1906 it was a dirty, badly-kept town; weedy streets and smoky-looking buildings that needed paint. Only yesterday a traveling man asked me if I remembered how we hated to stop in and how quick we got away from the town. The population in the city proper shows an increase of 1500; the celery and trucking district an increase of 400 per cent.; there are 600 more residences and a large number of new stores and office buildings.

The homes show prosperity, and the grounds are attractive instead of the old patches of weeds. Four years ago the total shipments of celery, cucumbers, cabbage, lettuce, eggplants, potatoes, tomatoes and other things amounted to 228,000 packages. During this year, 1910, the total shipments are 1,050,000 packages. Five hundred and eighteen thousand dollars are on deposit in the banks. Four years ago the amount in bank to the credit of depositors was \$265,000. The \$265,000 increase has been more than double that amount, and that in less than four years. This is not all the money. A great deal has been spent on land and in the improvement of farms; the stores and residences cost much money, and even now many people are living in rooms waiting for new houses to be finished.

Five long avenues and two streets have been paved with vitrified brick; all curbing is of granite. The city has a complete system of water-works, gas and electric-light plants, ice factories and storage factory for cooling refrigerator cars, and a local and suburban car line with the latest model gasoline rolling stock.

The statement has been made recently that 100,000 men and women left the States last year for the cold Canadian country, and that as many more will leave this year. They will have only a few months in the year to plant and gather crops; they must suffer the ills and discomforts of that very cold country during the larger part of every year. Some of these good people could grow rich, live long and happily in Florida, where the flowers are forever in bloom and the cold winds do not bite; this great State offers an open season 365 days in the year.

Forty passenger and freight trains stop at and start from Sanford every day, and the big river steamers of the Clyde Line run between Sanford and Jacksonville daily.

The development and prosperity and the possibilities of this part of the country is a verdict in favor of the good that a little work will get out of the earth. Some dig gold and coal from depths where the sun never shines for so much per day, and the gold and the coal is owned by another. Come to us and you can dig the things from the soil to get the comforts of life much easier than the man down in the shaft. We have the room and the climate in which both man and beast may live with comparative ease.

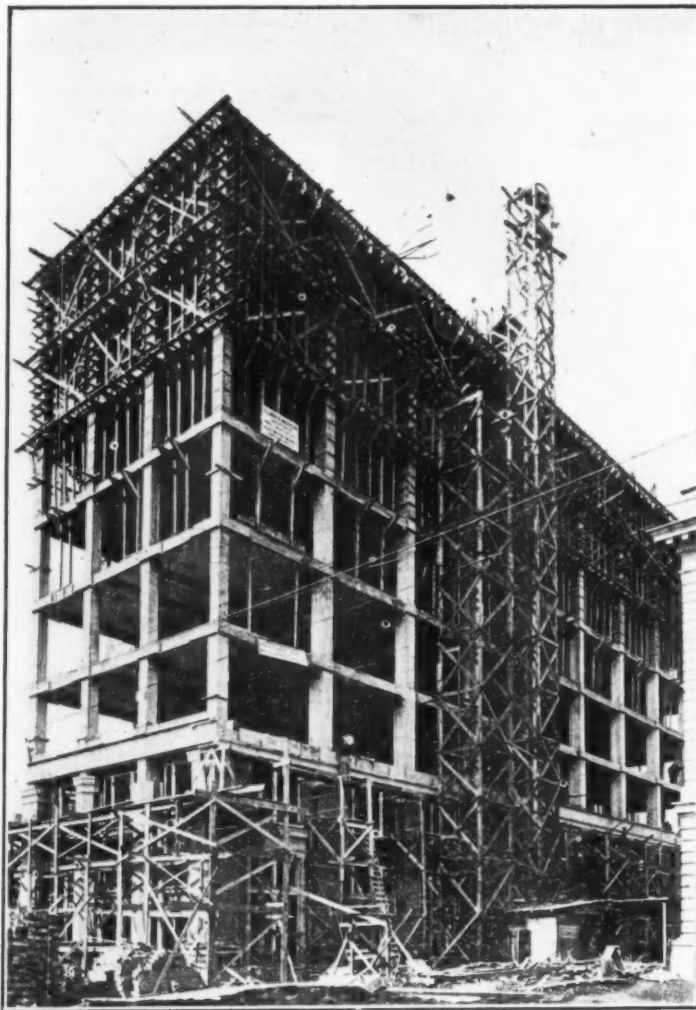
All newspaper articles, magazine articles, advertisements and even private letters about this country should be given serious consideration by those who read them. This is a picturesque, temperate, fertile country, and the big, broad pioneers who are here invite men of brains, energy and capital to help them build a great State and at the same time grow comfortable while the opportunity is open.

CRACKS IN CEMENT.

Information Wanted as to Their Prevention.

Editor Manufacturers' Record:

The owners of a large cotton mill in North Carolina built an addition to it, consisting of a two-story building. The foundation consisted of a very heavy mass of concrete, reinforced with scrap pipe. At one corner of this building rock was encountered and the footing rested on it. Away round on the other side of the building, while the bottom was not good, it is not as bad as is very frequently met. The owners were extravagant rather than economical with material, it being their intention to build solidly. The walls from the concrete footing to the second floor are 26 3/4 inches thick, laid of hard brick in Portland cement mortar without any lime, and the bricks were flushed up every



ROBSON AND PRITCHARD BUILDING, HUNTINGTON, W. VA.

Under construction; cost complete, \$300,000; fireproof throughout; reinforced concrete construction; 10 stories high; architectural stone trimmings; manganese spot brick; oak interior; marbled fiber floors; 160 offices, each with fireproof vault, hot and cold water and running ice water; lower floor for bank; garden on roof; architects, Elzner & Anderson, Cincinnati; general contractor, Roche-Bruner Building Co., Cincinnati; superintendent of construction, H. C. Lindsay, Huntington; high-speed elevator by Otis Elevator Co., New York; safes and vaults by Victor Safe & Lock Co., Cincinnati; vacuum cleaning, plumbing and heating systems by West Virginia Plumbing & Heating Co., Charleston.

course. The building is 230 feet long and 54 feet wide, the form of construction being that of a mill building, consisting of a great many large windows, so that the weight of the upper floor and roof was practically carried on the piers formed by the solid brick between the windows. There are no sills used, the brick being beveled up to the window frame and finished off as a sill.

In several places in the middle of the space between the windows small cracks extending clear through the wall developed. In some places the cracks extend vertically through the bricks as well as the joints.

The owners have another cotton mill, built exactly as this one is, without any cracks, and as the utmost care was used in the construction of this work they are at a loss to understand why there should be cracks, and they are inclined to blame the cement, or the particular brand of cement, notwithstanding the fact that the cement was sufficiently strong to force the crack to follow a vertical line through the brick rather than to follow the course.

Can you suggest a way to avoid these cracks in future work? Do you think the cement could have anything to do with it?

Again, the secretary of this cotton mill was building a residence for himself and constructed an eight-inch wall under his front porch, carrying it down about four feet below the ground to get solid bottom. About four feet from one corner there is a window frame constructed of heart cypress thoroughly dried and primed before being

set. A crack has appeared in front of the eight-inch brick wall running for the most part horizontally between the courses of bricks, and the only theory that the writer can advance is the swelling of the window frame. Is such a thing possible?

G. F. B.

Concrete Buildings in Texas.

[Special Dispatch to Manufacturers' Record.] El Paso, Tex., July 14.

There is now and has been for the past three months a marked improvement in the cement market, and, based principally upon the laws of supply and demand, prices are better than for a considerable period. Taken as a whole, conditions in the Southwest are admirable, and were it not for the continued vigorous and money-losing competition of the new mills in California as relating to Arizona and contiguous territory, conditions could scarcely be improved upon. There is a growing demand for cement in all branches, but particularly for irrigation and mining projects. Building construction also is having its full inning. One town alone in West Texas now has 10 new buildings of reinforced concrete, where eight months ago the method was only talked about.

SOUTHWESTERN PORTLAND CEMENT CO.

Bumper Crops Assure Prosperity.

[Special Dispatch to Manufacturers' Record.] Kansas City, Mo., July 13.

Situation in West has been very healthy, with small advances in prices during May.

The customary lull in business in this section from June 25 to July 15 is now on. The lull is always caused by labor leaving building work to enter the harvest field. Bumper wheat crops are being harvested, with excellent prospects of a record-breaking corn crop. Result must be large building operations throughout the Middle West section, calling for large quantities of Portland cement, which is natural indication of a firm if not an advancing market.

IOLA PORTLAND CEMENT CO.

Remarkable Substitution of Cement for Lumber.

[Special Dispatch to Manufacturers' Record.] Philadelphia, Pa., July 13.

The price of cement in the West and the South has advanced 30 cents per barrel, and in the East, where the price was already higher than in the South, 10 cents per barrel. Two years ago there was an overproduction of 100 per cent, staring the manufacturers in the face, as the estimated capacity of the plants at that time was 100,000,000 barrels per year and the consumption only 50,000,000. Present conditions indicate a consumption of 75,000,000 barrels this year. This increased demand, coupled with the fact that large Eastern manufacturers for two years have sold large quantities South and West at unprofitable figures, has caused the advance. The increase, we believe, is largely due to the sale of Portland cement to farmers and other small consumers and the general prosperity of the South and West. Western dealers report sales of 16 barrels of cement per 1000 feet of lumber, against one barrel per 1000 feet five years ago.

WM. G. HARTRANFT CEMENT CO.

200 Miles of Steel Pipe.

[Special to Manufacturers' Record.] New York, July 13.

The Texas Company's order for about 200 miles of steel pipe, reported in the *Daily Bulletin of the Manufacturers' Record* of today, is for a new oil trunk line from Shreveport-Caddo field to Port Arthur, Tex. This new trunk line for oil distribution will prove of very great value to the Caddo field by providing increased facilities for the shipment of oil, and likewise of value to Port Arthur by enlarging the supply of oil available for refining. The order was distributed between the National Tube Co. and the La Belle Iron Works.

Ayden's Openings.

Ayden, N. C., July 13.

Editor Manufacturers' Record:

This practically new town is almost an agriculture-made town. It is in one of the finest and best farming sections of East North Carolina, and is one of the greatest trading centers. There are good room and fine opportunities for some new openings. There is one of the finest chances for a good hardware and implement store that will carry in connection with hardware a general line of improved farming machinery. The country is now just beginning to use farm machinery.

The opportunity is open for a good drug store, and there is great need of a national bank. It is a fine station for a manufacturer's distributing point, especially for improved farm machinery, gasoline engines, sawmill and cotton-gin machinery, plows and many other such things; in fact, it is a country making great strides.

Farms that sold for \$1 per acre 10 and 15 years ago are now worth from \$100 to \$200 per acre. We raise the finest bright tobacco, the best cotton, always making a good crop under most any circumstances, and get good yields. Most all small people own their own homes and do their own work and pay their debts, which makes it a fine country and a good town and good citizens.

J. A. HARRINGTON.

TRUCKING IN THE NORFOLK REGION.

By A. JEFFERS.

[Written for the Manufacturers' Record.]

While from the great trucking belt around Norfolk one or more crops are being sent North and East and West every month in the year, there are seasons when a dozen or more crops are running at once. Such is the case at present. Potatoes, cucumbers, squash, tomatoes, peas, beans, green corn and many other minor products are making an immense volume of soil products moving to market from producers to consumers. Of course, in this great trucking work there must be a soil to permit or aid the growth of fruits and vegetables, a soil adapted and constituted so as to encourage the growth of a variety of crops. We have such a soil in the Norfolk trucking belt. The climate must be favorable. The weather facts, figures and features issued by the weather bureau in Norfolk show conclusively and convincingly that we have the best kind of conditions to be found on the North American continent. Liberal, well distributed rainfall, plenty of sunshine, and a very long frostless season combine to aid the tiller of the soil and sustain and prosper him in his work. No matter how favorable the climate or how productive the soil, there must be a market, and the markets of 50,000,000 consumers are within 24 hours of our market gardens both by water and by rail. Therefore, the three principal or most important requisites—soil, climate and markets—are in our favor.

One more very essential feature must not be overlooked or underestimated. It is the transportation facilities and the freight rates, and both are so closely allied that they may be considered as one. Up to within a few years all truck shipped from the Norfolk trucking belt was sent away on steamer lines leading from Norfolk to New York, Washington, Baltimore, Philadelphia, Providence and Boston. As the trucking operations here increased with enormous strides it was often the case that all these great seaboard markets were glutted with the immense quantities of perishable truck shipped to said cities.

Then the railway came onto the scene and began to compete for a portion of the business. The Pennsylvania system built the New York, Philadelphia & Norfolk Railway to Norfolk by way of the Eastern Shore of Virginia and Cape Charles, requiring a four-hour water trip across the Bay from Cape Charles City to Norfolk.

If all our soil products were sent to market by water, every market along the seaboard would be glutted half the time, with immense losses to the producers here. The railway comes onto the scene and solid trains of truck are sent from Norfolk across the bay, a trip of 40 miles, requiring four hours to make it, and such trains are run to market, often on express, mail and passenger schedules. In fact, the regular mail passenger and express trains are manipulated so as to give the "right of way" to the perishable freight, which must be hustled to market as fast as possible.

At the outset this method was considered impracticable and unprofitable to both the producers and the railway people. But the plan was conceived in a master mind and carried out by a master manipulator of men and methods. Now for some of the results. I have the data for one day's shipment. On Saturday, June 18, the New York, Philadelphia & Norfolk shipped out of Norfolk 410 cars of perishable freight, also 225 cars of same character from the Cape Charles side, making 635 cars of soil products sent in one day over one line of railway to Northern and

Western markets. Most of these cars were iced, and the contents could be safely sent to any market in the Middle West and the Eastern markets relieved that much. But the principal point in this communication is to show the volume of the trucking work. It requires about 600 men to load one of the steamers of the Old Dominion Line at Norfolk in 10 hours' time. It takes 30,000 packages, as they run—boxes, barrels, crates and baskets—to fully load such a steamer. A large portion of the produce sent on these steamers, and on the steamers running daily to Boston, Providence, New York, Philadelphia, Baltimore and Washington, is brought down to the harbor by means of little sail vessels, each holding from 50 to 500 barrels or packages of truck. It is estimated that there are 5000 such craft in these waters. They run up ever stream, inlet, creek or arm of the sea to the thousands upon thousands of farm wharves and landings, and take the truckers' truck directly from farm to steamer. This method of transporting perishable truck from farm to the Norfolk shipping center is economical, rapid and easy on tender fruits and vegetables. It is a short haul from farm to farm wharf, and no trucker has to haul more than two to three miles at farthest—most of them an average of one mile only. From wharf to city there is no jolt, or jar, or jam, or damage done. It costs from 5 to 10 cents per package freight on the truck from farm wharf to city wharf. Two steamers a day are often required to carry the produce to New York, 20,000 to 30,000 packages each. Two steamers go to Baltimore and Washington daily, and one to Philadelphia, and one each to Boston and Providence. It is an immense volume of agricultural business or work.

The transportation facilities and the volume of business, the number of packages handled in a single day in Norfolk reads like a romance. It is an agricultural romance, and the trucking industry, by reason of the great uncertainties connected with it and the fact that fortunes are made and lost every year in the work, is nothing more nor less than agricultural gambling. The business, however, is steadily on the increase. Both intensively and extensively it is on the increase, and this makes the increase almost a geometrical increase rather than an ordinary arithmetical one.

Oceana, Va.

North Carolina Development.

[Special Cor. Manufacturers' Record.]

Raleigh, N. C., July 18.

The first report on losses by forest fires in North Carolina will be submitted by State Geologist Pratt, and will cover the year 1909. Dr. Pratt says that the loss totaled \$3,000,000, and that nearly all of this could have been prevented. The loss was not only of standing timber, but of houses and other property. The chief places for fires are the mountains and the pine forests in the sand-hill section. The loss is absolute, and in the mountain regions brings about other troubles, including washing of slopes and the ruin of lowlands. The State geological board has completed the inventory of the standing timber in the 16 counties west of the Blue Ridge, and it is being made for the remainder of the State. The State itself is the holder of more than 500,000 acres of timber in the eastern counties. These lands, officially known as "swamp lands," have been sold for a song until recently, but are now withheld, pending a very careful survey and valuation. The report of the

geological board will also include the wood-using industries in the State.

The MANUFACTURERS' RECORD's great interest in improved roads has had a powerful effect in the South, and Dr. Pratt referred to this fact. This is an important part of his efforts. Forty counties in the State are at work upon the best type of roads. These counties not only use their own convicts, but also in a number of cases secure those from others which are not engaged in permanent road construction. Under a new provision the State furnishes expert engineers to counties in this line, and these are now making surveys and giving suggestions in six counties. Dr. Pratt says that while Mecklenburg, where the good-road movement first started, yet leads in mileage, Guilford is making such great progress that it is a close second. It is found that convict labor is admirable for this work, and that about 2000 convicts are thus employed.

The State geological board has nearly completed a report on the mica deposits, which lie largely in the counties in the high mountain region and in the southern Piedmont section. This State furnishes a very large portion of the best mica used in this country. During the next 90 days a survey of what is known as the Virgilina copper district, located largely in Granville county, will be completed.

Governor Kitchin, who is at the head of the geological board, is deeply interested in drainage work. It had been hoped that this work would begin early the present year on a great scale in Hyde county, with Lake Mattamuskeet, owned by the State, as a center, but there is delay for lack of unity of idea.

F. A. OLDS.

The Birmingham Iron Market.

[Special Cor. Manufacturers' Record.]

Birmingham, Ala., July 18.

The pig-iron market has been very quiet, both inquiry and sale ends. Birmingham interests report their strict adherence to \$11.50 and \$12 prices. This, of course, for standard Alabama iron. Prices for Southern iron, broadly speaking, have been heard of as low as \$11 per ton at the furnace. In trying to trace the origin of such prices I found that they wholly belong to the Tennessee irons and the Northern Alabama high-phosphorus irons. This, of course, is "rumor." But a very small tonnage of iron was booked the past week, probably not over 1,500 tons. Of this tonnage the majority was small lots. No one seems to be able to intelligently ascribe a reason for the stupor, but nevertheless it is highly prevalent in our midst. There is a feeling, apparently, on the part of buyers that bottom has not yet been reached, and the tendency is to hold off. There is no denying the fact that a comfortable tonnage has been placed by the more important interests at low figures. This is but natural, when one considers the fact that so long as the small buyers stay out of the market it gives the larger ones full sway to hammer prices and take on their requirements. While they are doing this the small fellow stands back and waits for the price to go still lower, so that he may step in and get a slice. It usually happens that such an attitude on his part forces the market upward, and in the end he pays the price, as well as the "freight." Southern charcoal iron is quoted at \$22 to \$22.50 per ton at the furnace.

There were no new developments in the cast-iron pipe market. There has been no curtailment of output of this product, and prices have ranged about the same for the past several months, notwithstanding the fact that the pig-iron market has violently fluctuated. Following prices are quoted per net ton f. o. b. cars at the plants here: Four-inch, \$24; 6, 8 and 10-inch,

\$21; 12-inch and over, average of \$20, with \$1 a ton extra for gaspipe.

There has been an unprecedented movement of coal, and some large contracts are now pending, especially from the railroads. Representatives of several of the important companies have been in New Orleans and other points for several days past placing their bids and receiving orders.

SOMETHING ABOUT SWAMPS.

While the papers of the country are giving so much space to details of the reclamation of the so-called swamp or wet lands of the South, it is well for everyone to have a correct idea of these terms, and not imagine because land is wet there is water on it several feet deep.

As a matter of fact, the designation "swamp" has been very much misused or misinterpreted. "Wet" hardly fits the case when applied to many of the large areas now being ditched. Damp would be a better word, because in large part the land in the South which is being reclaimed is only damp, and that for but a short time after a very heavy rainfall.

The majority of farms all around us have their wet patches, unless they are like Sol Smith Russell's perpendicular farm, and as every progressive farmer knows the ease with which such land is made tillable by a well-placed ditch, so the problem in the South will be more correctly understood when it is realized the situation is like that on the farm, only on a larger scale.

Let's get out of our minds the notion of swamps as our childhood's fairy stories pictured them—impenetrable gloom, bottomless morasses and sure death to every traveler. Imagine in their place broad prairies bathed in sunlight and covered with nourishing grasses and sweet wild flowers, the home of the mockingbird and nightingale, a land to look upon with delight, adjacent to steel highways and rivers for transportation, and in many cases immediately adjoining towns that are among the oldest in civilization and culture in America.

When nature fashioned this continent these lands were made flat, with some parts a little lower than others. When it rains hard the water settles in pockets on this flat land until it is dried up by the sun. Oftentimes in a tract of so-called swamp lands only a part needs ditching, while the major portion may be perfectly dry, but is surrounded by land that is not at once tillable without first getting the rainwater off of it.

The character of this soil which has never had a plow in it may be imagined. It would seem as if the prodigal hand of nature held fresh surprises for the South as each year goes by. It is hard to compute the value of this new asset, the importance of which we are only beginning to appreciate.

A \$1,000,000 Hotel for Dallas.

Some weeks ago the MANUFACTURERS' RECORD referred to the plans of Adolphus Busch of St. Louis and associates for the construction of a hotel at Dallas, Tex. Arrangements have now been completed ensuring the erection of the structure, and Barnett, Haynes & Barnett of St. Louis are preparing the plans and specifications. These will call for the erection of a 20-story building, in the Louis XIV style, at a cost of about \$1,000,000. The building will have casement windows opening from floor to ceiling, with ornamental iron-barred balconies. It will be constructed of red velvet brick, trimmed with Bedford stone, and will be elaborately carved and embellished with model ornaments of the Louis XIV period. The entrance is to be covered by wrought-metal canopies constructed of bronze and glass, and the build-

ing will have a French roof, a roof garden and a Circassian walnut and gold lobby extending through two stories to a glass-domed roof, with balconies from the second story. In the basement will be Turkish and Russian baths, with a marble plunge bath designed in the Pompeian style. There will be every provision made for the comfort and convenience of guests, including elevators, private baths, plumbing lined with white marble, telephones, electric lighting, steam heating, roof garden for summer and winter, etc. It is understood that construction will begin soon.

Fort Worth's Growth.

Board of Trade,
Fort Worth, Tex., July 16.

Editor Manufacturers' Record:

The building permits for the past month represent \$400,000, an increase of \$66,000 over the preceding month. May had been the banner month for 1910 heretofore.

The packing-houses, which may be considered Fort Worth's greatest producing asset in the manufacturing line, have shown a wonderful growth for the past few years. Compared with 10 years ago, the annual business is \$75,000,000 to \$500,000, the number of live-stock slaughtered 1,665,000 to 65,000, and those employed at the plants 5000 to 200. Closely allied to the packing industry are the stockyards. They display the same growth. Where 15 acres sufficed for a site in 1900, now 50 acres are required. Then, 163 pens held the live-stock coming to market; now 1217 are required to hold them. These pens then would hold 146 cars of live-stock per day; now 1332 cars of cattle, horses, sheep and hogs can be yarded. Then the total number of head of live-stock coming to market annually was 89,500; last year the number was 2,288,700.

The \$200,000 bonus necessary for the securing of the Texas Christian University has just been raised after a campaign of two weeks. Five thousand inhabitants will be added to the city, while more than \$750,000 will be poured into the city through this source annually. Temporary quarters have been secured by the college, and next fall will find the university with the largest attendance in her history.

This week 200 men, with 100 teams, will begin work on the 11 miles of levee, which, when completed, will protect from overflow more than 4000 acres of land in one of the most suitable parts of the city for the location of factories. These advantageous factory sites have been unavailable for practical purposes heretofore, but with the dyke protection no better or more advantageous sites can be had. The work will cost \$250,000.

H. E. HERSHEY,

Secretary.

Value of Southern Lands.

The Board of Trade of Little Rock, Ark., is notifying a number of real-estate dealers in other States that they are very much mistaken in their advertisements that there is an untold acreage of very cheap land in Arkansas, and that land acreage is being offered at almost a nominal sum by the sawmill men generally. The Board of Trade has taken great pains to ascertain the intention of the mill owners in regard to their cut-over timber land, and has written to 20 of the largest owners. The replies show that, as a rule, the mill men are now turning their attention more than ever to scientific methods in conserving their supply of timber so as to have a supply for years to come.

Nearly all of them write the Board of Trade that while they will not sell large tracts for speculative purposes, they will be glad to entertain propositions from in-

dividual buyers for actual settlement. One company writes that it has about 23,000 acres about equal distance from Little Rock and Pine Bluff, which is in the market in a body, and that this land is particularly adapted to truck farming; that the country is healthful, and the land is good creek bottom where not upland or hilly. Five of the companies write that they are listing none of their holdings for sale. One of the leading companies in Southwest Arkansas writes that while it will sell to immigrants direct for agricultural purposes, it does not contemplate selling any great acreage, preferring to hold for the steadily-increasing prices. "It is time," the Little Rock Board of Trade writes, "that the outside dealers should put a quietus on the fairy story of the boundless acres to be had in Arkansas for a song. These stories are beginning to hurt. As compared with prices in Illinois, Indiana, Iowa and other Middle Western States, \$25 per acre is cheap enough for land anywhere in Arkansas. Don't give away your land."

The suggestion made by the Little Rock Board of Trade, to the effect that Southern lands should not be sold at ridiculously low prices, is a wise one.

Big Drainage Contracts Awarded.

A dispatch from Helena, Ark., tells of two important contracts awarded for extensive drainage systems in Phillips county. It is in part as follows:

"The directors of the Yellow Banks drainage district have opened bids for the construction of two drainage ditches (the Yellow Banks and Cypress ditches) in the southern end of Phillips county. The former will be 24 miles long and the latter 15 miles. The contract was awarded to O. O. McDonald & Co. of Collinston, La. Actual work is to begin within 30 days. "The district will issue \$85,000 worth of bonds to cover the cost of the work, which will be about \$70,000. A levee will be constructed alongside of the Cypress Canal, protecting the land on the east from the back water of White River.

"These canals or ditches will drain about 65,000 acres of fine farm lands in this county. This will be the first of these ditches to be dug in Phillips county, and the beginning of work of this character, which will likely be continued for 10 years before the lands of the county are thoroughly drained.

"There will probably be another district organized to embrace the land from the Helena line to connect with the commencement of the Yellow Banks Canal, near Old Town, 15 miles south of Helena. The officers and directors of the Yellow Banks drainage district are: R. C. Burke, president; E. M. Allen, secretary; Lee Pendergrass and Harry E. Kelley.

"The contract awarded to R. E. & G. A. McWilliams of Walnut and Chicago, Ill., for the construction of a canal to drain the surface waters of Helena into Long Lake has been signed. The firm will begin clearing the right of way about August 15 and complete the contract before the new year."

Shreveport Natural Gas.

As a result of the efforts of the Chamber of Commerce of Shreveport, La., E. K. Smith, president, and S. C. Buckley, secretary, the city is to receive natural gas for factory purposes at four cents per thousand cubic feet, a reduction of 3.7 cents per thousand cubic feet.

Referring to this reduction, the Shreveport *Times* says:

"Probably no two men in the city receive more credit for the reduction of gas from .0770 cents per thousand feet than do Messrs. E. K. Smith and J. B. Ardis. They have both worked faithfully for the

reduction, and last night were jubilant over the fact that they had at last succeeded.

"Mr. Smith announced last night that in the event it was the desire of the citizens of Shreveport to drill for gas or oil nearer the city than the wells of the above companies are located, either outside or within the city limits, that many of the most influential citizens, including himself and the managers of two of the gas companies, would contribute liberally toward the fund necessary to pay for the drilling of one or more wells.

"Probably no move that has been made in the past few years means as much to the city as does the obtaining of gas at 4 cents per 1000 cubic feet. Many factories that have desired to come to this city have held off for the reason that natural gas has been offered them at .0770 a thousand."

Leading Cities' Building.

The statistics of building operations in the principal cities of the United States during the calendar year 1909, just published by the United States Geological Survey, show that the country had in 1909 recovered from the financial disturbance of 1907-1908, for the building record for 1906 was surpassed.

The cost of building operations in 51 cities that reported for all three years was \$646,059,855 in 1907, \$566,165,404 in 1908 and \$771,937,564 in 1909, an increase for 1909 over 1907 of \$125,877,709, or 19.48 per cent., and over 1908 \$205,772,160, or 36.34 per cent. The estimated cost of building operations in these cities in 1906 was \$700,000,000, so that there was an increase in 1909 over 1906 of more than 10 per cent.

The increases and decreases for individual cities in 1909 as compared with 1908 are not very significant, because 1908 was not a normal year. The largest increase reported for 1908 was \$8,141,720, or 13.78 per cent., by Chicago, and the next largest was \$4,446,700, or 3.92 per cent., by New York; the increases in 1909 by these two cities were, respectively, \$28,003,580, or 41.65 per cent., and \$68,228,095, or 57.91 per cent. Brooklyn, which had the largest decrease (\$25,427,604) in 1908, showed the third largest gain in 1909—\$18,402,061. Of the cities that showed decreases in 1909, San Francisco had the largest, \$5,484,273, or 17.32 per cent.; Dayton was next, with \$1,533,780, or 47.42 per cent., the largest proportional decrease, and Oakland was third, with \$1,002,051, or 15.85 per cent. The decreases in these cities may be ascribed to local causes. The significant decrease in San Francisco indicates that the building activities of that city have probably reached a nearly normal condition after the abnormal condition following the great fire of 1906. The annual cost of building operations in San Francisco for the last five years has been as follows: 1905, \$18,268,753; 1906, \$34,927,396; 1907, \$56,574,844; 1908, \$31,668,341; 1909, \$26,184,068.

MUSSEL-SHELL INDUSTRY.

A Great Natural Resource of the South.

Mr. W. S. Watson of the Memphis Button Works, Memphis, Tenn., writes to the *MANUFACTURERS' RECORD*:

"The fresh-water shell supply of the South is one of the South's great raw material resources. There are now being consumed in the fresh-water shell industry about 70,000 tons of shells annually. The South is now being drawn upon, and will soon be called upon to furnish the principal part of this supply to the Northern and Eastern factories, which turn this material into the finished product, a staple article now exported to all the markets of the world. In the *MANUFACTURERS'*

RECORD of June 30, under the heading, 'Conservation of Mineral Resources of Louisiana,' C. Willard Hayes, chief geologist of the United States Geological Survey, referring to the mineral bauxite found in commercial quantities in the United States, says:

"Since the mining of these deposits began, in 1889, up to the close of 1897, about 540,000 long tons of bauxite have been produced in Alabama, Georgia, Tennessee and Arkansas, having a value at the mine of \$2,000,000. He quotes statistics to show that this product, having a value of \$2,000,000 at the mines, has been converted to \$48,000,000 in a manufactured state, and that one ton of ore, having a value at the mines of \$4, yields metals valued at about \$178, and adds:

"This difference of \$46,000,000 between the value of raw material and of manufactured product represents freight on raw material, labor, plant, power and profit."

"Mr. Hayes might have included mussel shells from the South on about the same basis. Thousands of tons of mussel shells are now being shipped to Northern and Eastern factories and to Germany, at a value on the river bank at from \$4 to \$15 per ton. Every ton of these shells may be turned into finished product at a value of not less than \$150.

"It follows, therefore, as with the bauxite referred to by Dr. Hayes, that the finished product would be greatly cheapened or that the profits on the investment would be increased by the manufacturing of pearl buttons in the South, thereby receiving all the benefits, from taking out the raw material to marketing the finished product, from one of nature's great productions, and one which may be permanently maintained by proper conservation."

Interested in Copper Ingots, Etc.

D. Blumann, Postgasse 6, Vienna, Austria, writes the *MANUFACTURERS' RECORD*:

"I may say that American raw metals, and especially copper (electrolytic) in the form of blocks, ingots, cakes and wire bars (free from entry duty here), are interesting me. These are finding in our country a ready market, and although the greatest part is coming from America, the large American mines and works are not in direct connection with the customers of our country. It would be to their interest to take up business direct with the consumers in our country, these being rich old first-class firms (copper rolling mills and wholesalers), who buy considerable quantities and pay cash against shipping documents. Being everywhere well introduced, with good connections, I can guarantee a large business to any trustworthy and competitive American copper producers or merchants who would give me their representation for sales in Germany and Austria-Hungary, or in the latter country only."

Among the correspondents of Secretary W. B. Powell of the Board of Trade of Tampa, Fla., bearing upon home-seeking in Florida is O. G. J. Schadt of Ocean Grove, N. J., who offers to distribute Florida literature free. Dr. Schadt, according to Mr. Powell, brought 78 persons to Florida last winter.

At an enthusiastic meeting last week of the Mobile Progressive Association \$25,000 were raised in six minutes toward the fund of \$100,000 to be used in inducing factories to establish in Mobile.

The third annual meeting of the Atlantic Deeper Waterways Association will be held at Providence, R. I., August 31-September 3.

The estimated assessed value of Texas property this year is \$2,350,000,000, an increase of \$50,000,000 over last year.

GOOD ROAD WORK NEAR CHATTANOOGA.



STRINGERS RIDGE TUNNEL.



MISSIONARY RIDGE TUNNEL.



ROAD LEADING TO STRINGERS RIDGE TUNNEL.



ROAD UP LOOKOUT MOUNTAIN.

In the construction of good roads Hamilton county Tennessee, of which Chattanooga is the county seat, has been most active. Altogether there has been built so far about 500 miles of modern highways, while in the Chattanooga-Chickamauga National Military Park, which is but a few miles from Chattanooga, the Government has constructed about 100 miles of boulevard. Within the past five years Hamilton county has built 100 miles of good roads, and this work is being continued on a still broader scale every year. The accompanying illustrations give a comprehensive idea of the splendid work being done by the county.

The two tunnels are somewhat unique in the construction of good roads, and evidence the manner in which Hamilton county is carrying on its work. The Stringers Bridge tunnel, just north of Chattanooga, is 300 feet long, 30 feet wide and 23 feet high. This tunnel is lined throughout with concrete, and has two concrete portals reinforced with steel. The other tunnel passes through Missionary Ridge and is 800 feet long, 30 feet wide and 23 feet high, and is lined with brick, with concrete portals and side walls. This latter tunnel will cost \$150,000, this amount being provided through a bond issue. The accompanying illustrations



ROAD LEADING TO MISSIONARY RIDGE TUNNEL.

also show the splendidly-constructed roads leading up to these tunnels.

Another illustration gives a good idea of the character of road constructed on Lookout Mountain. This road winds throughout this most interesting, historical section. The county has now in the course of construction under a bond issue of \$50,000 a very fine roadway leading to Rossville, Ga. This road will be the finest in the entire county. It is to be graded 80

feet wide and will be a dustless road, being constructed in accordance with the most approved ideas of the day in regard to preventing dust and standing up under automobile traffic.

Most of the road work is constructed with the workhouse forces, and the county has complete machinery and equipment for building its roadways. All of this work comes under the jurisdiction of Judge S. M. Walker, who is largely responsible for

the splendid results which Hamilton county has obtained. Actual construction work is under the supervision of W. L. Dodds, county surveyor and county engineer.

GOOD ROADS**WEEK'S HIGHWAY RECORD.****Progress in Southern Road and Street Improvement.**

[Full details of highway undertakings are given in the Construction Department.]

Bonds Voted.

Lake Charles, La.—City has voted \$300,000 of bonds for streets, sewers, city hall, etc.

North Emporia, Va.—Council appropriated \$5000 for street and sidewalk improvements.

Bonds to Be Voted.

Clifton Forge, Va.—City is considering issuance of \$65,000 of bonds for paving streets and sidewalks, etc.

Elberton, Ga.—City is considering issuance of \$25,000 of bonds for macadamizing residence streets.

Linden, Ala.—Marengo county votes in September on issuing \$200,000 of bonds for road improvements.

Southport, N. C.—Town Creek township votes August 15 on \$15,000 bond

issue for road improvements.

Sparta, Ga.—Hancock county votes July 23 on \$60,000 bonds issue for road improvements.

White Springs, Fla.—City contemplates voting on \$5000 bond issue for street improvements.

Wiggins, Miss.—City votes August 10 on \$5000 bond issue for street improvements.

Wise, Va.—Wise county votes November 22 on issuance of \$700,000 of bonds for road construction.

Contracts Awarded.

Abilene, Tex.—School trustees awarded contract for 12,000 square feet of cement walks, etc., costing \$3000.

Clarksburg, W. Va.—City awarded contract for curbing, pavement, etc., to cost \$40,000.

Dothan, Ala.—Houston county awarded contract for constructing a 13-mile road and a nine-mile road.

Eupora, Miss.—City awarded contract for 5000 cubic yards of grading, 3000 square feet of crossings, 100,000 square feet of sidewalks and 250 culverts.

Fort Barrancas, Fla.—G overnment awarded contract for macadamizing National Cemetery road; cost about \$15,000.

Galveston, Tex.—Galveston county awarded contract at \$5792 for construction of sidewalk and curbing.

Lexington, Ky.—City awarded contract for asphalt paving on East Main street; estimated cost \$70,000.

Little Rock, Ark.—City awarded contract at \$3500 for resurfacing street intersections.

Longview, Tex.—City awarded contract at \$60,000 for constructing brick and macadam pavements on various streets.

Memphis, Tenn.—Shelby county awarded contract for constructing 23 miles of turnpike at a cost of about \$17,250.

Memphis, Tenn.—Turnpike Board awarded contracts for constructing about 30 miles of road in Shelby county.

Nashville, Tenn.—Board of Public Works awarded contract for curbing and sidewalk paving to cost about \$10,000.

Paris, Tex.—City awarded contract for rock asphalt pavement on Graham street, North 18th street and Lamar avenue.

Pensacola, Fla.—Maxent Land Co. awarded contract for five miles of concrete sidewalk.

Towson, Md.—Baltimore county awarded contract at \$8500 to open and macadamize Hillsdale avenue.

Trenton, Tenn.—City awarded contract for graveling and grading about five miles of street.

Contracts to Be Awarded.

Baltimore, Md.—State Roads Commission opens bids July 27 for constructing three miles of stone macadam road in Cecil county.

Birmingham, Ala.—City opened bids July 20 for asphalt binder macadam, bituminous binder macadam, bitulithic or granitoid sidewalks and gutter pavement.

Clarksville, Ga.—City opens bids August 5 for constructing 600 linear feet of curb and gutter, 8000 square yards of macadam pavement and 900 square yards of brick or concrete sidewalks.

Decatur, Ala.—Morgan county receives bids until August 9 for grading and macadamizing about 14 miles of road.

Fort Howard, Md.—Constructing Quartermaster opens bids August 15 for constructing macadam roads, resurfacing macadam roads, concrete walks and crosswalks.

Fort Morgan, Ala.—Contracting Quartermaster opens bids August 5 for constructing brick-paved roads and cement sidewalks.

Gulfport, Miss.—City opens bids August 2 for construction of about 13,000 square yards of sidewalk.

Leland, Miss.—City opens bids August 2 for constructing concrete sidewalks.

Little Rock, Ark.—City will pave portions of Main and 3d streets with vitrified brick, asphalt or creosoted blocks.

Lynchburg, Va.—City appropriated \$15,000 for improving three streets.

Marlin, Tex.—City opened bids July 20 for 58,000 feet of paving on three streets.

Morgantown, W. Va.—Monongalia county will let contract in about 30 days for constructing 3000 linear feet of brick pavement 26 feet wide, with necessary concrete curb and sidewalks, etc.

Moss Point, Miss.—City receives bids until August 1 for grading five miles of city streets.

Newport, Tenn.—City will probably award contract to local contractors for constructing concrete sidewalks costing \$2000.

Oklahoma City, Okla.—City receives bids until July 25 for grading various streets.

Pawhuska, Okla.—City will pave 15 blocks with asphalt.

Richmond, Va.—City Council appropriated \$15,000 for improving streets in Washington Ward.

Savannah, Ga.—Chatham county will construct boulevard about 19,400 feet long.

Selma, Ala.—Dallas county has surveys for road between Selma and Burnsville.

Spartanburg, S. C.—Spartanburg county plans awarding contract on July 27 for constructing six miles of road 30 feet wide.

West Palm Beach, Fla.—Palm Beach county opens bids July 28 for constructing cement sidewalks.

Wytheville, Va.—Wythe county opens bids August 2 for constructing three and one-quarter miles of macadam road.

New Orleans-San Antonio.

Sam Park, president Beaumont and Jefferson County Good Roads Association, Beaumont, Tex., writes to the MANUFACTURERS' RECORD:

"There is yet no definite and actual plan as regards the construction of a continuous good highway between New Orleans and San Antonio. The success of the project depends entirely on the public. My idea is that each county and parish along the route should do its share, thus accomplishing the work without entailing a burden on any community. I have secured copies of the law, as well as legal advice, and distributed the information, so that those interested could familiarize themselves with the legal limitations of a county or parish to render assistance in the construction and improvement of highways. The State of Louisiana, where the greatest need for roads exists, is now employing its convict labor on the highways, and Governor Sanders is outspoken in his advocacy of this character of development. The constant and daily-increasing use of the automobile is demonstrating the need for and utility of good roads, and the highways of Texas compare favorably with those of any State. I do not feel that I am oversanguine in prophesying that the road will be eventually built."

A Carolina Organization.

Two hundred citizens of 18 of the lower counties of South Carolina have organized the Good Roads and Drainage League of South Carolina, with Col. James Cosgrove, Charleston, president; Wardlaw Moorman, Columbia, vice-president; E. I. Reardon, Sumter, secretary and treasurer; Samuel Dibble, Orangeburg; G. R. Rembert, Richland; R. L. Wright, Sumter; H. H. Husbands, Florence; S. L. Simons, Dorchester; H. P. Williams, Charleston; J. W. Kelly, Williamsburg; J. B. Johnson, Georgetown; W. W. Smoak, Colleton; R. K. L. Lybrand, Lexington; H. E. Gyles, Aiken; J. F. Folk, Bamberg; A. J. Cau-

then, Calhoun; Neils Christensen, Beaufort; L. F. Barnwell, Barnwell; B. F. Moore, Hampton, executive committee.

Wise County Association.

The Wise County (Va.) Good Roads Association has been reorganized with Messrs. John W. Chalkley, president; W. B. Fulton, secretary and treasurer; H. F. Whitehead for Richmond district, Dr. T. M. Cherry for Gladeville district, A. P. Crockett for Lipps district and Thurston Banner for Roberson district, vice-presidents. These officers were made an executive committee of the association, and were requested to take charge of and conduct the citizens' movement in aid of carrying the election to be held September 6, 1910, for an issue of \$700,000. Every citizen of the county interested in good roads is asked to join the association.

Mississippi Enthusiasm.

During the past two weeks four counties of Mississippi have determined to issue good-roads bonds aggregating \$1,000,000. The latest action was taken by Hinds county, in which Jackson, the capital of the State, is situated. Upon petition of nearly 70 per cent. of property-holders, announcement has been made that the county will issue \$200,000 of good-roads bonds.

To Maintain Roads.

Governor Austin L. Crothers estimates that \$1,000,000 a year will be expended annually upon the maintenance of the highways of Maryland after they have been improved.

Corbin to Somerset, Ky.

Cecil Williams, secretary, writes from the "Headquarters of Somerset's New Railroad," Somerset, Ky., thus:

"At a meeting of the citizens of Somerset it was decided to build a road from Corbin, Ky., through Somerset to Hopkinsville, Ky., to connect with the Illinois Central. We have already interested foreign capital in the project, and at the meeting last week their representative was present. They make a most fair proposition, and there is little doubt but what the proposed road will be built. It is intended to first build the line from Corbin to Somerset, a distance of 35 miles, and thence to the Cumberland River, a distance of 7 miles, making a total of 42 miles. A survey will be started at once and the right of way secured. The road will traverse the richest coal and timber section of Kentucky, and form a connecting link between the Atlantic and the Gulf."

Richmond Power Corporation.

S. Dabney Crenshaw of Richmond, Va., and associates are planning the organization of the Richmond Power Corporation to build an electric plant at Midlothian, Va.

They have chartered the company with a capital stock of \$500,000, and propose a plant with an initial installation of 10,000 horse-power, additional units to be installed as necessitated by demand.

At first the company will supply electricity for power only, and plans transmission lines to Richmond, Petersburg and Norfolk. The plant will use as fuel coal from the mines at Midlothian.

Those interested with Mr. Crenshaw are Levin Joynes of Richmond, F. W. Menlon, St. John Clark and Henry B. Twombly of New York.

Mr. Crenshaw writes the MANUFACTURERS' RECORD that details of the plant have not been determined.

The Julian Canning Co. of St. Bernard parish has demonstrated that Louisiana corn can be successfully and profitably canned.

RAILROADS

[A complete record of all new railroad building in the South will be found in the Construction Department.]

INTERSTATE COMMERCE.

Statistics Show Large Growth of Traffic and More Safety for Passengers.

The Interstate Commerce Commission has issued an abstract of its twenty-second annual statistical report, which covers the fiscal year ended June 30, 1909. It shows that the total single-track railway mileage in the United States was then 236,868½ miles, an increase of 3215 miles as compared with the previous year. In addition to this there were nearly 21,000 miles of second track, 2169 miles of third track, 1453 miles of fourth track and 82,376 miles of yard track and sidings. Substantially complete returns were received for 235,402 miles of line operated.

The total operating revenues were \$2,418,677,538 and operating expenses \$1,599,443,410. The former showed an increase over the previous year and the latter a decrease. Operating revenues averaged \$10,381 per mile and operating expenses \$6865 per mile. The net operating revenue was \$819,234,128; the total net revenue, \$823,171,097; operating income after the payment of taxes, \$738,031,543; gross corporate income, \$937,072,561; net corporate income, \$388,164,115; balance to credit of profit and loss after the payment of dividends, etc., \$110,786,441; total balance to the credit of profit and loss, \$768,528,408.

The income account of leased roads is displayed separately, showing gross income from leases \$116,533,953; net income from leases, \$110,738,184; balance to credit of profit and loss, \$16,606,085.

The par value of railway capitalization was \$17,487,868,935, or \$59,259 per mile of line as represented by the amount outstanding, namely, \$13,711,867,733.

The railroads carried during the year 891,472,425 passengers, an increase of 1,462,851, and the passenger mileage was 29,109,322,589, an increase of 26,485,645; they also carried 1,556,559,741 tons of freight, an increase of 23,577,951 tons. The ton mileage was 218,802,986,929, an increase of 421,432,127. The average receipts per passenger per mile were slightly less than two cents, the exact figures being 1.928 cents. The average receipts per ton per mile were a little more than three-quarters of a cent, the exact figures being 0.673 cent. The ratio of operating expenses to operating revenue was 66.16 per cent.

The total number of persons employed was 1,502,823, an increase of 66,548.

The equipment of the companies consisted of 57,212 locomotives, an increase of 479; 2,218,280 cars, of which more than 2,000,000 were freight cars. Nearly all cars and engines are now equipped with airbrakes and automatic couplers.

There were 8722 persons killed and 95,626 injured on the railroads during the year. The number of passengers killed (included in the foregoing) was 253, and the number injured 10,311, a decrease of 128 and 1245, respectively. Nearly 5000 of the total killed were trespassers on the railroads, and about 5750 of such were injured.

Analysis of all the figures respecting passenger transportation shows that travel was much safer in 1909 than it was in the year previous.

BONDS SOLD IN PARIS.

Kansas City-St. Louis Electric Railway Said to Be Now Assured.

The proposed electric railway between St. Louis and Kansas City, according to a report from the latter place, is assured

as the result of a deal closed in Paris for the sale of \$15,000,000 of bonds by D. C. Nevin, president of the St. Louis & Kansas City Electric Railway Co. It is further stated that the directors have approved the sale of the securities, and the funds are to be available as soon as the bonds are delivered to the purchasers.

The promoters of this enterprise have been at work on it for about 18 months, and the engineers have located the route for about three-quarters of the distance. The line will run from St. Louis to Kansas City via St. Charles, Warrenton, Williamsburg, Columbia, Arrow Rock, Marshall, Higginsville and Odessa. It will be about 250 miles long. The company, it is stated, owns 10,000 acres of coal land, some of it in Howard, Boone and Lafayette counties. Power plants will be so situated as to obtain fuel supply from these sources at the lowest cost.

Chas. A. Loomis of Kansas City, general solicitor of the company, is reported as saying that the money for construction should be available by September 1, and that contracts will be let and construction begun immediately after that. From a year and a half to two years will be necessary to complete the line, which will cost about \$12,000,000. It is contemplated to operate electric trains every hour for accommodation service, but with four express trains daily to stop only at the principal stations. Freight service will be conducted mainly at night. Such is the plan of operation outlined.

Headquarters are in the Commerce Building, Kansas City, and among those composing the corporation are D. C. Nevin, president; John H. Berkshire, vice-president; B. L. Dorsey of Alton, Ill., second vice-president; H. E. Insley, secretary and auditor; Henry V. Johnson, treasurer. Mr. Nevin, it is stated, was formerly general attorney of the Pacific & Idaho Northern Railway at Denver, Col. Mr. Johnson was at one time Mayor of Denver and United States District Attorney for Colorado. Mr. Berkshire is president of the Berkshire Lumber Co. of Kansas City and vice-president of the National Bank of the Republic. Mr. Dorsey is a railroad contractor and coal-mine operator.

Among others mentioned interested as directors are W. D. Griffith, vice-president of the Charles D. Griffith Shoe Manufacturing Co., and W. Weston, mining engineer, both of Denver, Col.; Geo. A. Anderson, mine operator and capitalist of Glasgow, Scotland, and Denver; R. S. Mahan of the Central Trust Co. of Denver; W. A. Hamilton, attorney, Chicago; C. W. Reeder of Hayes City, Kans.; Daniel F. Lewis, vice-president of the United States Title Guaranty & Indemnity Co. of Brooklyn, N. Y.; P. H. Rea, banker, Marshall, Mo.; Chas. Hoefer, president of the Higginsville (Mo.) National Bank, and Shirley Moore of Kansas City.

THESE CONTRACTORS BUSY.

Several Important Pieces of Railroad Work, an Aqueduct and a Dam.

Carpenter & Boxley, railroad contractors, Roanoke, Va., have considerable work on hand at present, including several important pieces of railroad construction. A member of the firm says:

"On the Norfolk & Western Railway in West Virginia we have one contract at Huger, change in line, which includes the driving of two double-track tunnels, one single-track tunnel, and raising the grade and lining an old single-track tunnel, with about 260,000 yards of excavation, most all rock, about 20,000 yards of concrete work; approximate cost about \$400,000.

"We also have three and one-half miles of double track for the Norfolk & Western Railway near Glen Alum, W. Va. This consists of about 250,000 yards of excavation, mostly rock, and one bridge; approximate cost about \$150,000.

"Work on both of these pieces of work is progressing nicely. All is to be finished by June, 1911.

"We have a contract with the Virginian Railway near Pembroke, Va., for furnishing about 500,000 yards of ballast for track. This work is progressing nicely, having in two Gates crushers, crushing from 600 to 1000 yards per day. About 33 per cent. of the work is done.

"We also have a small contract for lining a 700-foot tunnel with concrete for the Seaboard Air Line Railway at Divide, Ga. Machinery has all been shipped to this place and erected, and we expect to get the work finished by October 1.

"At the present time we are building a part of section 47 on the New York aqueduct in Ulster county, New York; approximate cost \$1,000,000; work will be finished in 1913; progress very satisfactory.

"We have at Thirteen, Ky., a lock and dam for the United States Government; cost of work already let to contract about \$275,000. Progress on this has been good; about 66 per cent. is finished, and we are hoping to finish the excavation and masonry by December 25."

NORFOLK'S NEW TERMINAL.

Three Roads to Erect Union Passenger Station to Cost About \$1,000,000.

It is expected that construction of the proposed union passenger station at Norfolk, Va., including a nine-story office building, will begin soon. The architects, Reed & Stem of New York, have applied to the building inspector for a permit to erect the structure, application being made on behalf of L. E. Johnson of Roanoke, Va., president of the Norfolk & Western Railway and also of the Norfolk Terminal Railway. The depot is to be used by the Norfolk & Western, the Norfolk & Southern and the Virginian railways, although other roads may use it in the future.

The principal building or head house will be nine stories in height, one of the floors to be a mezzanine. It will be 200x51 feet, and 123 feet in height. The waiting-room and annex will be 140x53½ feet, and the building for the power plant and the handling of baggage and express matter will be 35x330 feet. The Norfolk Terminal Railway has \$1,000,000 capital, and it is expected that the cost of the improvement will be nearly if not quite that sum. The several railroad companies interested will have their offices in the building, which will be constructed of brick and steel, with terra-cotta trimmings. The structure alone will cost \$500,000.

The terminal will front about 400 feet on Main street, adjoining Archer's lane.

AIKEN TO COLUMBIA.

James U. Jackson of Augusta, Ga., Preparing to Build Proposed Line.

The long-expected extension of the Augusta & Aiken Electric Railway from Aiken, S. C., to Columbia, S. C., is at last to be made, it appears. James U. Jackson, vice-president of the Augusta & Aiken road, and also of the street railway in Augusta, Ga., has recently been in Columbia closing deals with reference to the Gervais street bridge over the Congaree River, and the Saluda Power Co., and he is quoted as saying that options have been secured on nearly all the rights of way, but the line cannot be built in less than 18 months. It will require not less than 10 months to reconstruct the bridge and 15 months to build the dam on the Saluda River.

It is about 50 miles in a direct line from Aiken to Columbia, but the extension may be a little longer than that, thus making a line of about 75 or 80 miles from Columbia to Augusta. It will run through parts of

Aiken and Lexington counties, which need railroad facilities and which is a rich and fertile country.

According to a dispatch from Augusta, the proposed extension from Aiken to Columbia is part of the plan outlined some time ago to build an interurban electric railway from Atlanta, Ga., to Columbia, S. C., via Augusta, taking in the Augusta & Aiken Railroad. This will make a line about 280 miles long.

The dispatch further says that Redmond & Co. of New York, it is announced, have closed a deal for the interest of the Harri-man estate in the securities of the various properties connected with the Augusta & Aiken Railway for a consideration of \$2,700,000, and that the transfer of the properties will take place July 20, after which preparations will be made to build the road from Augusta to Atlanta and from Aiken to Columbia.

It is further stated that the properties included in the deal are the Augusta Railway & Electric Co., which conducts the street-railway and electric-light business in Augusta; the Augusta & Aiken Railway, the North Augusta Hotel Co. (owning the Hampton Terrace Hotel, opposite Augusta) and the North Augusta Land Co.

New Railroad Enterprises.

Among the new railroads recently organized or chartered are the following:

St. Louis, Fort Smith & Dallas Railroad Co., to build 60 miles of line from Fort Smith, Ark., to Wilburton, Okla., 50 miles; capital \$50,000. The directors are M. C. Burke and John H. Vaughn of Fort Smith, Ark.; R. S. Willie and R. C. Alexander of Rogers, Ark.; R. E. Reynolds and W. W. Murray of Arkoma, Okla. Mr. Burke is reported as saying that the company intends to finally build from St. Louis, Mo., to Dallas, Tex., and that survey is to begin within a month between Arkoma, a new town, and Wilburton.

The Mingo Railroad Co. of Charleston, W. Va., capital \$50,000, to build a line from a point near Lenore, on Pigeon Creek, on the Tug Fork of Sandy River, in Mingo county, to a point on the Guyandotte River near the mouth of Gilbert Creek, in the same county. The incorporators are Simon P. Richmond, V. L. Black, L. G. Summerfield, Angus W. McDonald and G. S. Couch, Jr., all of Charleston, W. Va.

The Savannah & Southwestern Railroad Co. chartered to build a line in Georgia from Savannah across the State, in the direction indicated by its title, to Fort Gaines, Ga., 230 miles; capital \$1,000,000. The incorporators are F. R. Durden and E. M. Frank of Savannah, W. T. Kicklighter of Bryan county, C. S. Price, N. A. Haggard, W. G. Warnell, G. W. De Loach, D. M. Bradley, J. H. Perkins, W. C. Perkins, C. W. Smith, J. V. Kelley, S. T. Ellis, M. A. Smith, P. M. Anderson of Tattnall county.

The Rock Island, Texico, Farwell & Gulf Railway Co. chartered in New Mexico to build from Texico to connect with the Rock Island, about 20 miles east of Tucumcari, and also to extend south from Texico to a connection with the Texas Pacific, for which a Texas charter will be secured. Contract is reported let to Mr. Temple for several miles of grading. The Chicago, Rock Island & Gulf Railway is evidently interested; headquarters at Fort Worth, Tex.

Fairview & Oklahoma City Railway Co., capital \$100,000, chartered in Oklahoma to build a line from Fairview to Rusk, four and one-half miles. The incorporators are O. E. Snyder of Oklahoma City, president; H. A. Noah, secretary; M. M. Fulkerson, treasurer, both of Alva, Okla.; W. D. Bowling, H. A. Bower, H. Clay Willis, all of Fairview, Okla., vice-

presidents; W. B. Noble, Alva, and S. B. Moore, Oklahoma City.

New Equipment.

The Galveston Electric Co. has received three new closed cars similar to those now operated by it. The company has also ordered and will soon receive five open cars, each seating 50 passengers.

The St. Louis & San Francisco Railroad Co. has purchased six gasoline electric motor cars from the General Electric Co., Schenectady, N. Y.

The 200 oil tank cars purchased by the Texas Company of Houston from the American Car & Foundry Co. of St. Louis include 85 single-compartment 8000-gallon cars, 10 two-compartment 8000-gallon cars, 15 three-compartment cars of the same capacity, 65 single-compartment cars of 6000 gallons capacity and 25 two-compartment cars of the same capacity. Deliveries are to be made as rapidly as possible, the contract dating from May 31.

The Texas Southeastern Railroad is reported to have ordered one 10-wheel locomotive from the Baldwin Locomotive Works, Philadelphia.

The Chesapeake & Ohio Equipment Corporation has been chartered in Virginia with authorized capital of \$1,000,000, and it is understood that equipment bonds will be issued.

The Virginian Railway has filed at Norfolk, Va., an agreement for the purchase of 1000 steel gondola cars at \$1177 each from the Pressed Steel Car Co., Pittsburg, Pa. This covers the cars ordered March 14.

The Knoxville, Sevierville & Eastern Railway, which proposes to build an extension, will need 16 miles of 56 or 60-pound relay rail. W. A. Seymour is chief engineer and general manager at Knoxville, Tenn.

Frisco's Gas-Electric Cars.

An officer of the St. Louis & San Francisco Railroad confirms the report that the company has purchased some gasoline motor cars, but the number is only six, instead of 12, as previously reported in a press dispatch. The cars are of the gasoline-electric pattern, and were ordered from the General Electric Co. of Schenectady, N. Y. They will be 70 feet 2 inches long, and each contains a baggage compartment 8 feet 1 inch long, with side doors, a compartment 10 feet 3 inches long for colored passengers, a smoking compartment 9 feet 11 inches long for white passengers, and a first-class passenger compartment 23 feet long. There are three toilet-rooms, an observation platform, electric lights, electric fans and other improvements, including Garland ventilators. The windows have automatic, metal-framed copper-wire screens. The seats will be finished with Frieze plush and the woodwork and ceiling will be in keeping with the best modern practice in car-building. A feature is that side entrances are provided between the smoking compartment and the first-class passenger compartment.

Purchase of a Railroad.

An officer of the Arbacochee Timber & Railway Co. of Hopewell, Ala., and Tallapoosa, Ga., informs the MANUFACTURERS' RECORD that the railroad of the Vanderbilt Timber, Mining & Southwestern Railway Co., a short line built several years ago out of Tallapoosa, has been purchased by the first-named corporation, which is chartered in Alabama; furthermore, that the contract for the reconstruction of the line and for additional mileage has not yet been let, as the company is awaiting some bids. It may be some time before the contract is awarded.

The officers of the Arbacochee Timber & Railway Co. are A. T. Hamilton, presi-

dent: W. W. Summerlin, vice-president, and C. G. Schmitt, secretary and treasurer.

It was previously reported that the railroad had been purchased by Charles W. Eckert of Lancaster, Pa., but the official here quoted writes that he is unknown to him, nor is he connected with the company.

Birmingham Belt Relocation.

The Illinois Central Railroad Co. will have charge of the work of relocating the Birmingham (Ala.) Belt Railroad for a distance of nearly two and one-half miles in Birmingham from Tenth to Twenty-second avenues; also making a connection with the Southern Railway. The bridge work will consist of frame trestles and cast-iron pipe culverts. Connection is also made with the Central of Georgia Railway. A. S. Baldwin is chief engineer at No. 1 Park Row, Chicago.

According to a press report from Birmingham, the contract for grading on this work was let by the Illinois Central at about \$85,000, the contractor being the Vance Contracting Co. Grading will begin immediately. Altogether about \$135,000 will be spent in the Norwood section.

B. & O. Statement.

The Baltimore & Ohio Railroad Co.'s statement for all lines of the system, but exclusive of outside operations, for June, as compared with June, 1909, shows gross earnings \$8,088,755, increase \$1,332,791; expenses \$5,540,250, increase \$987,457; net earnings \$2,548,505, increase \$345,334. For the 12 months of the fiscal year, as compared with 1909, the statement shows gross earnings \$88,901,252, increase \$12,488,396; expenses \$61,233,801, increase \$10,169,820; net earnings \$27,567,451, increase \$2,318,576. The gross earnings were the largest in the history of the company, but the net earnings, while much greater than in 1909, were less than in 1907, a banner year, owing to the large increase in operating expenses.

St. Joseph to Savannah, Mo.

The St. Joseph & Savannah Interurban Railway Co., which has let contracts to the J. H. Flick Construction Co. of Chicago, will have a line 10 miles long from St. Joseph to Savannah, Mo. The line runs through rolling country for the greater part of the distance, although some is rough. The bridges will include one pile trestle 500 feet long and 50 feet high and nine smaller trestles from 14 to 56 feet long. John H. Van Brunt is president; John I. McDonald, vice-president; Chas. E. Foster, secretary; Chas. W. Campbell, chief engineer, at St. Joseph, Mo.

Cincinnati to Pittsburg.

Charter has been obtained in Delaware for the Cincinnati & Pittsburg Electric Railway Co., capital \$20,000,000, the incorporators being residents of Huntington, W. Va. They are A. E. Cox, A. W. Werninger, C. R. Wyatt and C. P. Sanborn.

Mr. Cox is quoted as saying that construction will begin on the line (which will be 406 miles long, all on the Ohio side of the Ohio River) within two months, and it is expected to complete it within three years. Foreign capital is interested, and right of way has been secured for nearly the entire route.

It is contemplated to use Edison's storage-battery system, and it is reported that the well-known inventor is financially interested in the company as a stockholder.

Will Build Own Line to St. Louis.

The Nashville, Chattanooga & St. Louis Railway, according to a report from Nashville quoting E. C. Lewis, chairman of the board, will secure its own right of way to East St. Louis, which it now reaches by traffic arrangement with the Illinois Central Railroad. It appears that the road

will use the new bridge which is to be built by the Burlington system over the Ohio River from Metropolis, Ill., to a point near Paducah, Ky. The erection of this bridge and the completion of the proposed extension on the Illinois side of the river is expected to require about two years.

Four Bridges to Be Built.

The proposed reconstruction of four bridges over the Kaw River at Kansas City will, according to estimates made by Daniel Bontecou, the engineer, demand considerable expenditures on the part of several railroads. The total that the lines must pay is \$1,263,967, which is distributed among the Missouri Pacific, Union Pacific, Rock Island, Kansas City Southern, Chicago Great Western, Kansas City Terminal or Belt Line, and the Intercity Viaduct. These changes, it appears, are to be made on the Kansas side of the river.

Crosbyton-South Plains.

W. H. Denison of Lubbock, Tex., has the contract for grading and tracklaying on the Crosbyton-South Plains Railroad, to be 40 miles long from Lubbock to Crosbyton, Tex. There will be two trestle bridges 40 feet high and, respectively, 500 and 1000 feet long. Connection will be made with the Santa Fe at Lubbock. The route lies through level country. John A. Knox is chief engineer, and the other officers are P. C. Coonley, president; J. M. Bassett, vice-president and general manager, and R. M. Bassett, treasurer.

Sevierville Road to Extend.

The 15-mile extension which the Knoxville, Sevierville & Eastern Railway proposes to build from Sevierville, Tenn. southeast will probably be constructed with the company's forces; if not, contract will be let within 60 days. This extension is to reach timber land, but five miles of the extension will be utilized in the future as a through line. The route is through rough country, but no tunnels are required. There will, however, be two small timber bridges.

Railroad Notes.

A dispatch from Dallas, Tex., says that Col. E. H. R. Green, president of the Texas Midland Railroad, announces that he will hereafter spend most of his time in New York city to assist his mother, Mrs. Hetty Green, in the management of her business affairs.

A prominent official of the New Orleans Great Northern Railroad denies the current report that the company proposes to build an extension from Jackson, Miss., to a point near Memphis, Tenn. He says that it has no plans for extending north of Jackson at this time.

The Alabama Car Service Association reports that it handled during June 64,295 cars, an increase of 17,200 cars as compared with the same month of last year. The first six months of 1910 show a total of 406,525 cars handled, an increase of \$4,098 cars as compared with the same period last year.

Mark W. Potter, chairman of the Carolina, Clinchfield & Ohio Railway, 24 Broad street, New York, is quoted as saying that the company is proceeding with its intention to make Charleston, S. C., a terminal for the road, and will soon begin construction of a pier there. Entrance to the city will be obtained over the Southern Railway and the Atlantic Coast Line.

An officer of the Gulf, Colorado & Santa Fe Railway says that the company is not having any surveys made north of Longview, Tex., and it does not contemplate making any such in the near future. This is with reference to the press report that construction would soon begin for the projected extension to the coal fields of Cass county.

LUMBER

[A complete record of new mills and building operations in the South will be found in the Construction Department.]

To Expend \$750,000.

An estimate of building operations in progress or contemplated in Meridian, Miss., within the next few months indicates that approximately \$750,000 will be expended. Included in this estimate is a new city hall to cost about \$75,000, public schools to cost about \$100,000 and other public buildings to cost \$25,000. It is understood that bids will soon be invited for the erection of the Citizens' National Bank Building, to cost approximately \$150,000, while work will soon start on a new theater to cost about \$40,000. The United States Government will also soon begin the erection of an addition to the present Federal building to cost about \$50,000, and a company is being organized, it is stated, to erect a hospital to cost \$50,000. Among structures in course of erection is a roundhouse at the Northeastern shops, to cost \$40,000; Dr. Turner's hospital, to cost about \$15,000; E. E. Howard's store, to cost \$5500, and a number of other buildings. It is stated that the Eagle Cotton Oil Co. will build a brick office structure, to cost \$3000; the Priscilla Knitting Mills will expend about \$40,000 for a new building. In addition, a recent bond issue provided for road work in Lauderdale county to the amount of \$200,000.

To Develop Cottonwood Timber.

With reference to its recent purchase of timber land in Mississippi, the Link-Newcomb Mill & Lumber Co. of Benton, Miss., advises the MANUFACTURERS' RECORD that it purchased 1100 acres of cottonwood timber land fronting on the Mississippi River, in the southwest part of Claiborne county. This company manufactures hardwood and other lumber, and bought the property in question for development, intending within the next year to erect a modern band mill of 25,000 feet daily capacity to facilitate its purposes. The purchase price was \$42,000 cash. The company owns extensive timber rights in Yazoo county, and is at present operating two circular mills.

Wants to Buy Lumber.

Harry A. Loche, 547 Drexel Building, Philadelphia, Pa., writes the MANUFACTURERS' RECORD that he wants quotations from wholesalers for about five carloads per day of lumber, consisting of spruce, white pine, hemlock and oak.

Specifications of the sizes and quantity required can be had by addressing him. Wholesalers must enter into a contract for this delivery daily for a period of three to five years. Location of shipments and full information will be given upon application. No retail prices will be considered.

Buys 30,000 Acres Cypress Lands.

A dispatch from Pensacola, Fla., states that capitalists, represented by H. L. Baker of Plattenville, La., have acquired all the cypress lands and sawmill properties at Freeport, Fla., of the J. J. McCaskey Company. The lands aggregate about 30,000 acres of virgin cypress, while the plant is modern and well equipped. It is stated that the purchasers will increase the output of the plant. The purchase price is reported to be in excess of \$250,000.

Wants Timber Land.

M. P. Bonifant of Powhatan, Va., writes the MANUFACTURERS' RECORD that he is in the market for a large tract of hardwood or pine timber of fine quality.

Lumber Notes.

Building operations in the District of Columbia for June amounted to \$2,261,401 for new construction and \$313,263 for alterations and repairs.

The estimated cost of new structures for which permits were issued in Baltimore during June amounted to \$1,060,900, and for alterations and repairs to \$54,000, making a total of \$1,114,900.

Building operations in New Orleans from January to June, inclusive, are estimated to involve an expenditure of about \$500,000 more than for the corresponding period last year. This includes new structures, alterations and repairs.

MINING

Developing 30,000 Acres.

The MANUFACTURERS' RECORD is informed that the Asher Coal Mining Co. of Wasioto, Ky., which recently incorporated with a capital stock of \$350,000, is doing construction work preparatory to the development of 30,000 acres of coal lands which it owns. It is at present shipping three cars of coal per day. L. A. Osborn of Wasioto is the engineer in charge of construction, and George R. Marrs of the same city may be addressed with reference to equipment. Officers of the company are T. J. Asher, president; H. H. Asher, vice-president, and Robert Asher, secretary and treasurer.

Norfolk & Western Coal Shipments.

Coal shipments from mines on the Norfolk & Western Railroad during June amounted to 1,161,757 tons of commercial and 107,236 tons of company coal. Of these, the Pocahontas field shipped 800,457 tons commercial and 78,064 tons company; Tug River field, 123,128 tons commercial and 41,774 tons company; Thacker field, 122,298 tons commercial and 66,054 tons company; Kenova field, 55,463 tons commercial and 17,117 tons company, and the Clinch Valley field, 69,211 tons commercial and 4227 tons company. The condition of the mining industry throughout the Virginia and West Virginia fields is said to be most encouraging.

Kanawha and New River Districts.

Coal loading in the Kanawha and New River districts for June shows a decrease as compared with the loading for May, but an increase as compared with the loading for June, 1909. Shipments from the Kanawha field amounted to 766,490 tons, while coke shipments aggregated 8040 tons. In the New River district coal shipments amounted to 518,310 tons and coke shipments to 27,960 tons.

Mining Notes.

It is announced that the Pratt Consolidated Coal Co. of Birmingham will begin operations at its new coal washer at Coal Creek within a few days.

It is announced that the New Orleans & Northeastern Railroad has placed orders with coal companies operating in the Birmingham district for 300,000 tons of coal.

The Maryland State Horticultural Society will hold its summer meeting at Berlin July 28, and at Ocean City July 29. Its annual meeting and exhibition will be held at the Fifth Regiment Armory, Baltimore, November 28-December 3. Richard Vincent, Jr., White Marsh, is president, and C. P. Close, College Park, is secretary of the society.

It is reported that a company of which R. Ray Flint is manager will establish a cattle ranch upon 84,000 acres of land in the mountains of Swain county, North Carolina.

TEXTILES

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

Correspondence relating to textile matters, especially to the cotton-mill interests of the South, and items of news about new mills or enlargements, special contracts for goods, market conditions, etc., are invited by the MANUFACTURERS' RECORD. We shall be glad to have such matters at all times, and also to have any general discussion relating to cotton matters.

Norfolk Knitting Mills Corporation.

The Norfolk (Va.) Knitting Mills Corporation has acquired the Norfolk Knitting Mills from C. Brooks Johnston. This new company was reported incorporated last month with a capital stock of \$50,000, and its officers are: President, J. Katzenberger of New York; secretary-treasurer, C. Brooks Johnston. The plant has 55 knitting machines and 250 sewing machines for manufacturing boys' and men's underwear.

To Build Weaving Addition.

The Salisbury (N. C.) Cotton Mills will build an addition to weaving department. This addition will be of brick, one story high, 74x80 feet, and it will be equipped with 80 looms. The company now has 21,500 ring spindles and 590 narrow looms, driven by electric and steam power. Its output is gingham, chevrons, ticking, etc.

A \$300,000 Mill Company.

D. T. McKeithan, L. E. Williamson, C. B. Edwards and S. Vaughn of Darlington, S. C., propose organizing a \$300,000 stock company to build a cotton mill.

Textile Notes.

R. L. Gray of Gray Court, S. C., is interested in a plan to build a cotton mill.

J. A. Matthews of 242 Tucker street, Raleigh, N. C., is reported as to establish a carpet and rug mill.

The American Woolen Mills Co. of Parkersburg, W. Va., has been incorporated with \$5000 capital stock by M. R. Hansel, Charles L. Strehli and others.

L. L. Wagon, care of Union Grocery Co., Main and Bachelor streets, Union, S. C., contemplates establishing overalls factory and possibly waste mill, or both combined. He wants information and prices on the necessary machinery.

Will Consolidate Three Mills.

In connection with the organization of the Union Oil Mills of Hope, Ark., the MANUFACTURERS' RECORD is advised that it is the purpose of the new company to consolidate cottonseed-oil mills located at Hope, Ashdown and Okolona, Ark. The company is capitalized at \$500,000, with the following officers: W. Y. Foster, president and general manager; William Temple, vice-president; R. M. La Grone, second vice-president, and W. F. Bridewell, secretary and treasurer. During the coming year it is intended to remove the Okolona mill to Arkadelphia and enlarge it from a two-press to a three-press mill, equipping it with modern machinery.

Literary Notes.

How to Keep Hens for Profit. By C. S. Valentine. Publisher, the Macmillan Company, New York. Price \$1.50 net. Everything else being considered, more money may be lost in the poultry business than in any other farm enterprise, and yet it offers the best kind of rewards for the capital of time, money and labor put into it. The hen is not the responsible being. It's the man who handles the hen, and how he handles it. Many a farmer's wife, making eggs and chickens a side issue of her daily routine, can show at the

end of the year a better balance in the profit account than many a man who has stocked his henry with the best sort of breeds and has on hand the most approved appliances. The farmer's wife knows the hen and her habits, and succeeds. The male theorist is inclined to leave too much to the hen. Hence his failure. But the whole task of keeping the nation supplied with eggs and poultry must not be thrown upon the farmer's wife. She has too many other things to do to warrant her making the most of her opportunities. While no farm should be without its chicken yard, and no farmer's wife without her income from it, poultry raising as a commercial proposition should occupy practically the undivided attention of a man or a woman. One must get right down among the chickens and learn by experience. But he must not stop at that; he can find profit in studying the results of others' experiences. One of the means to that end is this book of Valentine's, devoted to the American class of fowls. Discussion of various breeds and the methods of improving them is followed by separate chapters on egg foods, mother and chicks, handling the chicks, modern ways of housing, expensive accidents and the common sense handling of common diseases. A concluding chapter is devoted to the Indian runner duck, in line with the author's conviction of the opportunity for profit in raising fowls to meet the increasing demand for food.

Manual of Gardening. A Practical Guide to the Making of Home Grounds and the Growing of Flowers, Fruits and Vegetables for Home Use. By L. H. Bailey. Publisher, the Macmillan Company. Price \$2 net.

It would be as unwise for an expert to offer the same advice to a hundred persons as to improving the surroundings of their homes as for a physician to prescribe the same medicine for a hundred different persons, even though they might be suffering from the same complaint. Every man's constitution is different from every other man's. So, for the surroundings of a man's home to be true, they should be the expression of that man's individuality, modified, to be sure, by environment, and, if necessary, carried out under advice of an expert having regard for all conditions. That principle is recognized in Professor Bailey's book, and he likewise expresses the hope that no reader of a gardening book will ever conceive the idea that reading a book and following it literally will make him a gardener. He also points out a fact not to be forgotten, that one gardening book cannot be made to apply in its practice in all parts of the country unless its instructions are so general as to be practically useless. Principles and points of view are the things that have wider application. Professor Bailey has had opportunity to observe both amateur and commercial gardening in all parts of the United States, and he has embodied the results of his observations in this handsomely illustrated volume. In separate chapters are discussed the general plan of home grounds and gardens, the execution of some of the landscape features, the handling of the land and of the plants, the protection of the plants from things that prey upon them, the growing of ornamental plants, annuals, herbaceous perennials, bulbs and tubers, shrubbery, lawn and street trees, coniferous evergreen shrubs and trees and window gardens, instructions on the growing of particular kinds of ornamental plants, the growing of fruit plants and vegetable plants, and concluding with suggestions and reminders for every month in the year, both for the North and for the South.

MECHANICAL

George W. Jackson, Inc.

In an illustrated pamphlet George W. Jackson, Inc., engineer, contractor and manufacturer, Chicago, has presented in a striking and convincing manner the company's various facilities for undertaking public and private work of large size.

The main feature of this pamphlet deals with subways, and in it are reports made on this subject by George W. Jackson, hydraulic and consulting engineer to the city officials of Chicago, regarding the building of subways for that city, together with illustrations and descriptive data of Mr. Jackson's patented underground system for street railways. Detailed plans are also included which will meet, it is said, the present and future requirements for a subway for Chicago. The pamphlet details the arrangement and construction of the system of subways, and reflects the study that has been devoted to this subject by Mr. Jackson. Illustrations show patented methods for various kinds of construction, such as temporary supporting form for masonry, bulkhead for tunnels, etc.; retaining walls, concrete foundation piers, excavating machine, marine aerial tramway, etc.

Important public and private works of various kinds that have been built by George W. Jackson, Inc., are illustrated, and a brief description of each is given. They indicate the wide field of engineering and construction in which this company engages, and evidence its facilities for rapidly and thoroughly carrying forward contracts committed to its care. A partial list of work contracted for and successfully completed by the company, representing an expenditure of over \$60,000,000, is given. This list includes almost every phase of construction in a large city, such as steel bridge work, conduit systems, foundations, storm sewers, elevated railway structures, structural steel for buildings and other purposes, tunnel work, subways, tunnels under rivers, pneumatic-tube tunnels, etc. The contracts now on hand approximate \$6,000,000.

In addition to its work as engineer and contractor, the company maintains and operates a large bridge and structural-steel plant covering 316,000 square feet, for the fabrication of steel for all purposes, and a disposal station and warehouse for the disposition of all excavated and surplus materials from general construction work and for the receipt and handling of fabricated steel, merchandise, etc. It also operates brass foundry with a daily capacity of 8000 pounds and a machine shop for the repair of machinery of all kinds.

The general offices of George W. Jackson, Inc., are at 754-756 Jackson Boulevard, Chicago, with a New York office at 46 Wall street.

The Marsh-Capron Concrete Mixer.

Contractors and others interested in concrete mixers will find their attention attracted by the accompanying illustration of the Marsh-Capron "Rail-Track" mixer. This machine's especial features cover three vital points—first, more powerful and vigorous admixture of aggregates; second, more positive utilization of every ounce of applied horse-power, and third, a closer approach to indestructibility of the machine itself by averting all wracking without loss of mechanical elasticity. The "rail-track" and flanged car-wheel bearings are the most notable innovations, but there are other improvements which are interesting men experienced in concrete work. The machine is built by the Marsh-Capron Manufacturing Co., Old Colony Building, Chicago, and is described in detail as follows:

"The drum is made entirely of a high-grade semi-steel of a special mixture, a metal of great strength and toughness and exceptionally hard, which offers the greatest resistance to the severe abrading action of the sand and stone. The drum is cast in two parts, the connecting flanges being machined to fit one within the other, accurately centering the two halves, which are securely bolted together, forming a drum of the most rigid possible construction. There are no rivets, bolts, projecting flanges or sharp corners on the interior; the heads are well rounded and so designed as to project the material toward the center. The mixer blades are formed of heavy steel, secured to the drum by round head bolts. The elevating buckets are of steel, large and of such shape as to deliver the material with the greatest speed to the discharge chute. Both mixing blades and buckets are so disposed as to give the most thorough mixing action to the material, giving the end to end as well as the lifting and pouring action so necessary to thorough and complete mixing.

"The main gear is made of semi-steel, and is cast in sections. The teeth are extra heavy, and of special design to give extra clearance at the bottom of the teeth. Should a tooth in one of the segments be broken through accident, a new segment can be fitted in a few minutes, and at a very small cost, as the labor of replacing these parts consists of removing only five bolts, the repairs being made with the drum in place and without disturbing any other part of the machine. Trunnion or track rings are made of standard steel railroad rails, rolled to a true circle and accurately fitted to a machined bearing on the drum and riveted in place. They are practically indestructible.

"The rollers or track wheels are fitted with patent dust-proof roller bearings. The hubs of the wheels are bored and fitted with renewable steel bushings to take the wear of the rollers. Dust collars, packed with a special high-grade felt, are fitted over the end of the hubs. The center of the hubs are chambered out and packed with 'cup grease,' as are the dust collars. Steel compression grease cups are fitted. Wheels are of extra large diameter, made of chilled car-wheel iron similar to standard railway car wheels, and of the same general design, having a heavy flange on one side. They are all of the same diameter, and revolve independently on the shafts. Roller shafts are of steel, of extra large diameter. They are supported by the steel frame and rigidly held in place by special steel lock plates, which prevent both turning and end movement.

"The drum is driven by a single gear, cast in segments and located at the center of the drum, being bolted between the two drum flanges. This single gear center drive gives a balanced and uniform turning motion to the drum, requiring much less power than the end gear or the double gear driven drum. All gears throughout are spur gears. The main pinion is of steel, is mounted on the countershaft, which is driven by the heavy spur gear meshing into the engine pinion. All gears are accurately molded from machine-cut iron patterns. Gear guards are fitted.

"Countershaft bearings are securely bolted to the sides of the steel channel frame. They have extra large bearing surfaces, run with high-grade babbit metal. Bearing caps are adjustable for wear, and fitted with steel compression grease cups. Countershaft is so arranged that it may be easily removed without disturbing any other part of the machine other than gear guards and brake band. On this shaft is mounted the intermediate gear and the main-drive pinion. It also carries the friction clutch and pinion for driving the hoisting drum for the power side loader when

loader is furnished. All standard machines have the countershaft key-seated and arranged for the power loader friction clutch and hoisting drum, which, if not purchased originally with mixer, may be ordered later and easily fitted, without additional machine work.

"The frame throughout is of steel, built up of heavy channels and angles, riveted together and rigidly braced. A heavy steel cover plate is riveted to the top of the frame at the rear, upon which is mounted the engine and boiler. This plate also gives additional stiffness and strength to the frame. The trucks are of steel, of extra heavy construction throughout. Wheels have double tires and extra wide face. Axles are extra heavy square steel. The rear axle is secured to the frame by

mixed. Thus the operation is practically continuous, there being no waste time of man or machine.

"The illustration shows the simple, compact and rigid construction of the 'M-C' power loader, and shows the ease with which the power-loading hopper can be replaced by a batch or a standard hopper, as these parts are made absolutely interchangeable on all mixers of the same sizes. The change of one hopper for another can be made without the use of a skilled mechanic, as all holes in frames and hopper are drilled or punched to match.

"The loading hopper is of rigid construction, the top edges reinforced and stiffened with channel iron. The bottom is made of one piece of heavy steel plate formed into a rounded chute, free from sharp cor-

ing in heavy bearings which are bolted to the loader frame.

"Especially attention is called to the manner in which the hoisting cable is attached to the hopper, equalizing the strain on the cable by passing it through a cast-steel tube, which acts as a large sheave, allowing the hopper to adjust itself to the strain, relieving the hopper and frame of injurious side-strains.

"The batch hopper is most economically used where the mixer is placed below the ground level, or where the material can be loaded into the hopper from a higher level, such as flat cars, or with derricks and buckets. An entire batch is loaded into the hopper while the previous batch is being mixed. When the mixed batch is discharged from the drum the discharge gate

down (when the threads are not rusted fast to the tank).

"The tank is pivotally connected at one end, as shown in cut, the pivot consisting of a standard 'swing joint.' The other end of the tank is carried by a car, working in a toothed quadrant (the lever being fitted with thumb latch and pawl). To regulate the amount of water delivered to each batch for a given mix: If more water is desired, the rear of the tank is raised; if less water is wanted, the tank is lowered, the toothed quadrant and lever rigidly holding the tank in the desired position. The tank, once set to deliver the desired quantity of water, will automatically deliver just this amount to each batch.

"The flow of water into and from the tank is controlled by a three-way cock placed just below the pivot of the tank, with the lever convenient to the operator. One side of the cock is connected to the supply pipe, one side to the tank and the third opening leads to the drum. The tank always fills up to the top. When it is desired to discharge the water from the tank into the drum the lever on the three-way cock is given a quarter-turn, shutting off the supply and opening the discharge pipe to the drum, allowing just the desired amount of water to flow from the tank. When the flow ceases the lever on cock is turned to first position, opening the supply pipe to tank and closing the pipe to the drum, allowing the tank to fill. An automatic air valve is placed at the highest point of the tank, which allows the air to escape, but closes when the water comes in contact with it. A drain valve is placed in the lowest point of the tank. It must be understood that the tank is only moved when it is desired to regulate the quantity of water delivered to a batch. The flow of water into and from the tank is controlled by the three-way cock lever only.

"Engines and boilers used on the 'M-C' mixers are designed especially for the machines. They are of strictly high-grade construction. The mixers are fitted with either steam, electric or gasoline power, or arranged for belt or chain drive. For general all-around service steam power is recommended as being the most reliable under all conditions of operation. The gasoline engines fitted give excellent service, but a more skilled operator is required to obtain the best results than for steam engines.

"A friction clutch is a prime necessity for the proper operation of a mixer with gasoline engine. It is always fitted on 'M-C' gasoline-driven mixers without extra charge.

"Where it is desired to use electric power we must know the voltage, whether alternating or direct current. If alternating current, we must know the phase and number of cycles.

"The above information is necessary in order that the proper motor may be fitted.

"All necessary fittings and connections are furnished with power equipment."

Peanut Machinery for Africa.

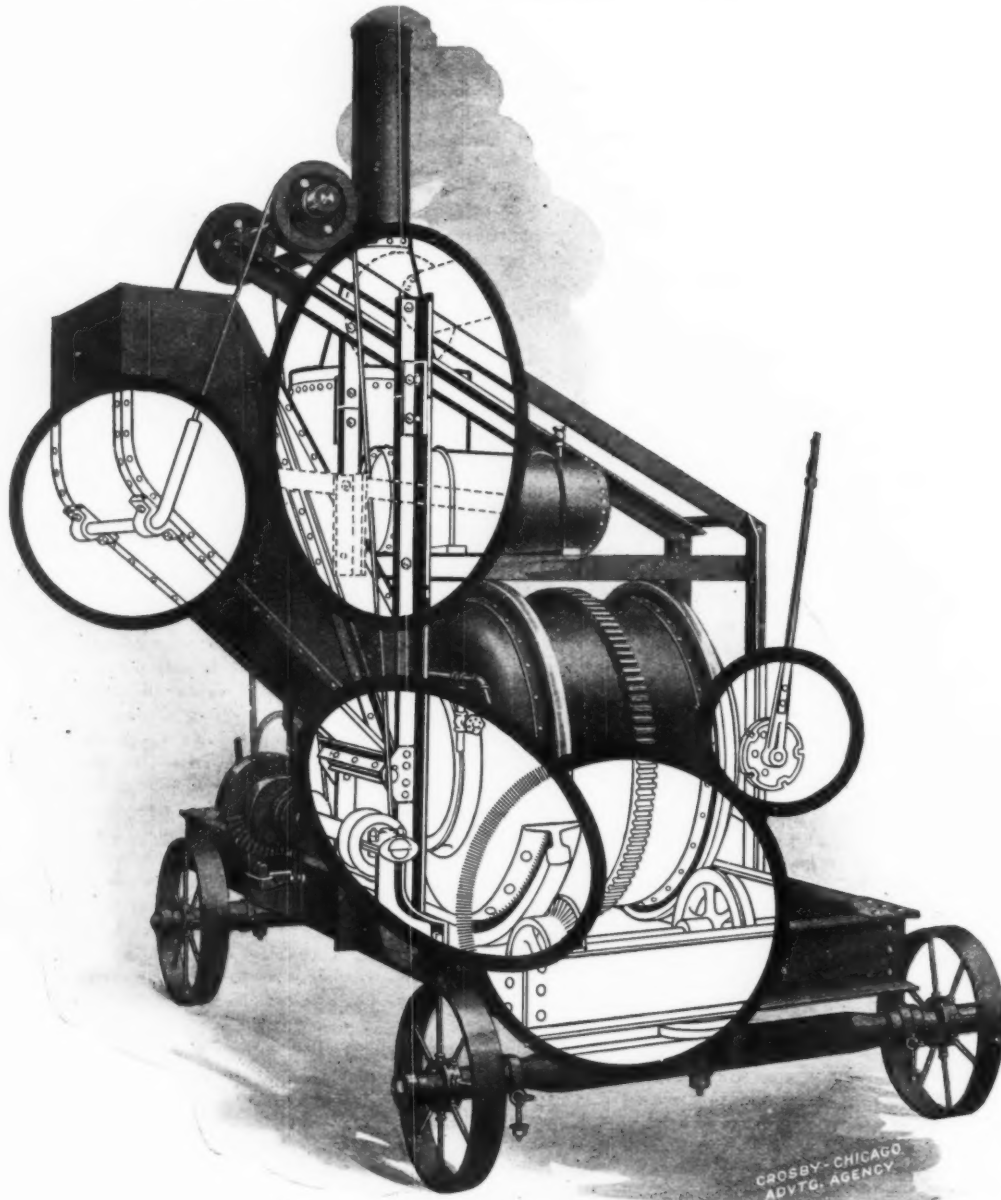
John Brutt Davy, Government agronomist and botanist, P. O. Box 334, Pretoria, South Africa, writes the MANUFACTURERS' RECORD:

"I shall be glad if you will kindly supply me with catalogues of peanut machinery for harvesting, threshing, winnowing, shelling and grading."

An Inquiry from Spain.

Joaquin Herm, Barcelona, Spain, writes the MANUFACTURERS' RECORD:

"I am interested in corresponding with manufacturers of brass tubing and latten brass, oil greases for making leather straps flexible, glaze kid in black and colors for shoemakers, and paraffin."



THE MARSH-CAPRON "RAIL-TRACK" CONCRETE MIXER.

heavy U bolts. Compression grease cups are fitted. A tongue is furnished with trucks, but breast yoke or whiffletree is not supplied except at an extra charge.

"By the use of a power loader in place of a standard hopper, the cost of mixing per yard is practically reduced by half, as the output of the machine is doubled. The power hopper is loaded on the ground level directly from the wheelbarrow, without the use of expensive platforms. While the batch in the drum is being mixed the loading hopper is filled, and as soon as the mixed batch is discharged the hoisting drum clutch is engaged, the loading hopper raised, dumping an entire batch of material into the drum, the hopper lowered to be refilled while the batch is being

mixed. Thus the operation is practically continuous, there being no waste time of man or machine. The discharge end of the hopper is pivoted close to the drum, and when raised to discharging position the mouth of the hopper fits closely into the 'chute' or 'apron' casting, discharging the material cleanly into the drum.

"The chute or apron casting also forms a splash plate, as can be seen; the water connection is made through this casting, a passageway being formed in the casting, terminating in a spout on the inside of the drum, delivering the water to the proper place, viz., on the dry material at the charging end. The pivot shaft is fixed to a saddle casting, which is substantially riveted to the hopper, the pivot shaft turn-

ing in heavy bearings which are bolted to the loader frame. The operation of mixing being practically continuous. Standard hopper, batch hopper and power-loading hopper are all absolutely interchangeable.

"The automatic water-measuring tank is of the closed type, cylindrical, and built of steel plate to safely carry a working pressure of 100 pounds. It is absolutely positive in its action. The quantity of water delivered to the drum can be instantly regulated. It is simplicity itself, and positively 'fool-proof,' as it has no floats, valves or leaves to become deranged, nor long threaded pipe to be slowly screwed up or

Construction Department

TO OUR READERS!

In order to understand and follow up properly the Construction Department items, please bear in mind the following statements:

EXPLANATORY

The MANUFACTURERS' RECORD seeks to verify every item reported in its Construction Department by a full investigation and complete correspondence with everyone interested. But it is often impossible to do this before the item must be printed, or else lose its value as news. In such cases the statements are always made as "rumored" or "reported," and not as positive items of news. If our readers will note these points they will see the necessity of the discrimination, and they will avoid accepting as a certainty matters that we explicitly state are "reports" or "rumors" only. We are always glad to have our attention called to any errors that may occur.

In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the MANUFACTURERS' RECORD.

ADDRESS FULLY

To insure prompt delivery of communications about items reported in these columns, the name of one or more incorporators of a newly incorporated enterprise should be shown on the letter addressed to that town, or to the town of the individual sought, as may be shown in the item, as sometimes a communication merely addressed in the corporate or official name of a newly established company or enterprise cannot be delivered by the postmaster. This will help to insure prompt delivery of your communication, although it is inevitable that some failures on the part of the postal authorities to deliver mail to new concerns will occur.

WRITE DIRECTLY

It is suggested to advertisers and readers that in communicating with individuals and firms reported in these columns, a letter written specifically about the matter reported is likely to receive quicker and surer attention than a mere circular.

The Daily Bulletin of the Manufacturers' Record is published every business day in the year for the purpose of giving the earliest possible news in regard to new industrial, railroad and financial enterprises organized in the South. It is invaluable to contractors, manufacturers, engineers and all others who want to get in touch at the earliest moment with new undertakings or the enlargement of established enterprises. The subscription price is \$25 a year. All advertising contracts in the Manufacturers' Record extending over a period of three months include a subscription for the length of time of the contract to the Daily Bulletin.

BRIDGES, CULVERTS, VIADUCTS

Ala., Birmingham.—Illinois Central Railroad Co., A. S. Baldwin, chief engineer, No. 1 Park Row, Chicago, Ill., will construct cast-iron pipe culverts and frame trestles.

Fla., Pensacola.—Pensacola & Southwestern Railroad awarded contract to Henry McLaughlin of Pensacola to construct 4000-foot bridge across Perdido Bay.

Fla., Tampa.—Hillsborough County Commissioners will construct steel bridge across Palm River; estimated cost \$9000.

Fla., West Palm Beach.—Palm Beach county will construct bridge across canal at Delray; bids to be opened July 28; W. H. Du Camara, chairman County Commissioners. (See "Machinery Wanted.")

Ky., Pineville.—Bell county will floor and repair wagon bridge across Cumberland River at foot of Pine St.; bids to be opened July 25; B. A. Fuson, Judge of County Court. (See "Machinery Wanted.")

Md., Baltimore.—Baltimore & Ohio Railroad, A. W. Thompson, chief engineer, Baltimore and Charles Sts., will begin about August 15 actual construction of first of four overhead crossings at its tracks in South Baltimore; this structure, to be located at

Hamburg St., will be 1100 feet long, including approaches, and be provided with street-car tracks; approaches will be built from center of four streets southward to building line, leaving in original street bed driveway of about 30 feet on north half of each street; sidewalk of bridge at Hamburg St. will be 10 feet wide and be separate from main bridge; reported expenditure, including rearrangement of tracks, changes in Camden Station, etc., estimated at \$1,000,000. (Previously mentioned.)

Md., Belair.—State Road Commission, John M. Tucker, chairman, Union Trust Bldg., Baltimore, Md., awarded contract at \$14,000 to David E. Evans & Co., 402 Hoffman Bldg., Baltimore, Md., for erection of reinforced-concrete bridge near Belair.

Miss., Biloxi.—Louisville & Nashville Railroad, W. H. Courtenay, chief engineer, Louisville, Ky., will, it is reported, rebuild bridge across Chef Menteur so as to allow clear passage of 60 feet width.

Mo., St. Joseph.—St. Joseph & Savannah Interurban Railway Co., Chas. W. Campbell, chief engineer, will construct one pile trestle, 50 feet high and 500 feet long; also two minor trestles from 14 to 56 feet each in length.

Okla., Oklahoma City.—Oklahoma County Commissioners, Park Board and Oklahoma Railway Co. (John W. Shartel, vice-president) awarded contract to Topeka Bridge Co., Topeka, Kans., to construct bridge over North Canadian River between city and Packtown; structure will be 200 feet long and 67 feet wide, sidewalks and 16-foot road on either side, and two car tracks; steel and concrete construction; estimated cost \$56,000. (Recently mentioned.)

S. C., Columbia.—Augusta & Aiken Suburban Railway, James U. Jackson, president, Augusta, Ga., will reconstruct Congaree River bridge.

Tenn., Sevierville.—Knoxville, Sevierville & Eastern Railway, W. A. Seymour, chief engineer, Knoxville, Tenn., will erect two small timber bridges.

Tex., Crosbyton.—Crosbyton-South Plains Railroad Co., John A. Knox, chief engineer, will construct two trestles, 500 feet and 1000 feet long, respectively, and 40 feet high.

Va., Clifton Forge.—City Council is considering issuance of \$65,000 of bonds for constructing bridges, etc. Address The Mayor. (See "Sewer Construction.")

Va., Norfolk.—Norfolk county will construct drive bridge over branch of Tanners Creek on line of Reservoir Ave. Ext.; structure to be 315 feet long and 18 feet wide; plans, specifications and bids are invited; F. L. Portlock, road engineer for Norfolk county, 240 Monticello Arcade. (See "Machinery Wanted.")

W. Va., Branchland.—Branchland Bridge Co. incorporated with \$20,000 capital stock by L. R. Via, A. M. Parson, J. W. Late and Rufus Switzer, all of Huntington, W. Va., and W. E. Bardslee, Clarksburg, W. Va.

CANNING AND PACKING PLANTS

Ala., Cuba.—Cuba Canning Factory organized with \$10,000 capital stock to establish cannery recently mentioned; will incorporate; L. Poole, president; Henry McDonnell, secretary and manager; secured 2½-acre site; capacity 10,000 to 12,000 cans per 10 hours; lumber and brick to be bought locally; will purchase machinery. (See "Machinery Wanted.")

La., Jefferson Parish.—Swift & Co., Chicago, Ill., purchased 21.21 acres of land between Harvey's Canal and Amesville for \$42,420, and will erect building and establish packing plant.

S. C., Georgetown.—Company organized with \$75,000 capital stock; H. B. Springs, president; Joseph Bull, manager; will establish cannery, cotton compress and gin.

Tex., Blooming Grove.—E. S. Smith and W. H. Brigance, both of Velasco, Tex., are interested in establishment of cannery.

Tex., Galveston.—Wallace M. Quinn of Crisfield, Md., will, it is reported, establish crab plant; cost \$12,000 to \$15,000.

CLAYWORKING PLANTS

Ala., Birmingham.—Brick.—Jefferson Brick Co. increased capital stock from \$25,000 to \$50,000.

Tex., Eustace.—Brick.—Burvo Brick Co. incorporated with \$150,000 capital stock; E. Miller of Athens, Tex., president; J. M. Massey of Fort Worth, Tex., vice-president and general manager; M. E. Edgar of Eustace, secretary; J. M. Murchison of Athens, treasurer; will operate 12-kiln furnace with daily capacity of 100,000 bricks.

Tex., Lexington.—Brick.—Lexington Brick & Tile Co. increased capital stock from \$7500 to \$25,000 and will construct sidetrack to plant, erect drying shed and kilns and install additional machinery.

COAL MINES AND COKE OVENS

Ky., Ashland.—Haly Coal Co. chartered with \$500,000 capital stock by J. F. Hager, J. W. Stewart and others, who represent parties who will control and manage company; not ready to announce plans.

Ky., Central City.—W. A. Wickliffe, Greenville, Ky., advises company is not yet incorporated to develop coal lands recently noted purchased; 6000 acres between Central City and Green River; P. R. Wickliffe, Greenville, construction engineer. (See "Machinery Wanted.")

Ky., Henderson.—Cahaba Coal Co., R. C. Middleton, president, Birmingham, Ala., purchased Corydon Coal Co.'s properties in Henderson county, including coal shaft and appurtenances and several thousand acres of coal rights.

Ky., Wasloto.—Asher Coal Mining Co., recently reported incorporated with \$350,000 capital stock, will develop 30,000 acres of land; first daily output three carloads; will install machinery; address proposals to Geo. R. Marrs; L. A. Osborn, engineer in charge; T. J. Asher, president; H. H. Asher, vice-president; Robert Asher, secretary-treasurer.

Md., Lonaconing.—George's Creek Coal Co., Harry E. Weber, president, Cumberland, Md., completed purchase of property of George's Creek Coal & Iron Co. at \$220,000; will expend \$15,000 for improvements, including new openings, tipples, railway sidings, etc.; company has incorporated with \$300,000 capital stock; offices, 418-422 Equitable Bldg., Baltimore, Md.; W. H. Cooper, Baltimore, is treasurer and sales manager.

Tex., Gordon.—W. W. Johnson is reported to construct 40-acre lake and erect miners' houses in connection with development of coal mines about three miles from Gordon.

W. Va., Hutchinson.—Consolidation Coal Co., Continental Trust Bldg., Baltimore, Md., is understood to be planning new development to cost \$250,000.

W. Va., Mable.—J. B. Jenkins Coal & Coke Co. (previously reported) will develop 14 acres; daily capacity about 500 tons; J. B. Jenkins, president and manager; W. T. Robinson, vice-president; S. O. Billings, secretary-treasurer; main office address, Parsons, W. Va.

W. Va., Morgantown.—J. H. and J. A. Clark leased property of Pitcairn Coal Co. for 20 years and will continue to operate as Harry B. Coal & Coke Co.; will make improvements and increase output; under contract minimum of 200,000 tons of coal is to be mined annually.

CONCRETE AND CEMENT PLANTS

Okla., Fairview.—Fairview Cement Co., Box 447 (recently reported incorporated with \$100,000 capital stock), will establish plant to manufacture cement-plaster material; will erect buildings 60x80x22 and 60x120x14 feet in size; semi-dryproof construction; will need millwright; machinery to be installed; M. E. France, president; C. H. France, vice-president; Chas. H. Elbert, secretary; Henry France, treasurer. (See "Machinery, etc., Wanted.")

Okla., Oklahoma City.—L. K. Sharpe Concrete Telegraph, Telephone & Railway Pole Co. organized with \$25,000 capital stock by L. K. Sharpe of Vicksburg, Miss.; will establish plant to manufacture hollow concrete poles; cost \$15,000; daily capacity 106 poles.

Va., Richmond.—Climax Concrete Machine Co. incorporated with \$50,000 capital stock; John Dahn, president; C. L. Albertson, vice-president; L. O. Wendenburg, secretary-treasurer; will manufacture concrete blocks and engage in construction work.

COTTON COMPRESSES AND GINS

Ark., Little Rock.—Sweet Home Cotton Gin & Compress Co. incorporated with \$7500 capital stock by Harry Keats (president), M. L. Berthe, T. F. Hutchinson and John R. Frazier.

Ark., Little Rock.—Cotton Ginners' Gin & Compress Co. incorporated by Harry Keats (president), John R. Frazier, T. F. Hutchinson and J. K. Thibault.

Ark., Madison.—Consumers' Cotton Oil Co. of Forrest City, Ark., will establish cotton gin.

Ark., Shaw.—Company organized with \$5000 capital stock; J. H. O'Kelley, president; Sloan Rogers, vice-president; Gus Carson, secretary; H. W. O'Kelley, treasurer; will establish cotton gin and grist mill.

Ga., Douglas.—Douglas Gin & Oil Co. (recently reported organized with \$35,000 capital stock to establish cotton gin, cottonseed-oil mill and guano factory) will erect 40x14 foot two-story brick ginhouse, two-story 60x100-foot seedhouse, brick and concrete 70x200-foot cotton warehouse; ginning capacity about 70 bales daily, with room in building for eight additional gins; will not build oil mill this season; officers to be elected July 26.

Okla., Willow.—Willow Farmers' Gin Co. incorporated with \$8000 capital stock by W. J. Underwood, E. F. Reed and others.

S. C., Allendale.—A. A. Richardson (recently noted to install steam plant in connection with ginners and lumber plant) will erect 20x20-foot shingle mill, 40x30-foot ginhouse and 40x20-foot sawmill; construction by owner; will install machinery; daily capacity, 10,000 shingles, 15,000 feet of lumber and 20 bales of cotton. (See "Lumber Plants.")

S. C., Georgetown.—Company organized with H. B. Springs, president, will establish cotton compress and gin. (See "Canning and Packing Plants.")

S. C., Lowndesville.—Lowndesville Oil Mill (C. S. Sullivan and others) will install four 7½-saw gins, doubling capacity of cotton gin.

Tex., Avalon.—Farmers' Co-operative Gin Co. incorporated with \$8000 capital stock by D. G. Swafford, T. A. Sisson, E. P. Jenkins and others.

Tex., Fort Worth.—Inland Compress Co. incorporated with \$40,000 capital stock by G. F. Witherspoon, F. J. Phillips and C. C. Rountree.

Tex., Lone Elm.—Lone Elm Gin Co. incorporated with \$4250 capital stock by J. P. McCaleb, A. A. Johnson, J. W. Fleeman and others.

COTTONSEED-OIL MILLS

Ala., Birmingham.—Farmers' Cotton Oil Co. (recently reported incorporated) has organized with \$80,000 capital stock; S. P. Brown, president; B. G. Riley, vice-president, both of Albany, Ga.; T. J. Kidd, general manager, of Birmingham; O. A. Armstrong, secretary, of Albany, Ga.; will establish plant for manufacturing cottonseed oil and dairymen's products; cost \$60,000; four-press mill.

Ark., Hope.—United Oil Mills (recently reported incorporated with \$500,000 capital stock) organized to consolidate three mills, at Hope, Ashdown and Okolona, Ark.; contemplates during coming year removal of Okolona mill to Arkadelphia and enlargement from two-press to three-press mill; W. Y. Foster, president and general manager; Wm. Temple, vice-president; R. M. La Grone, second vice-president; W. F. Bridwell, secretary-treasurer.

DRAINAGE AND IRRIGATION

Ark., Helena.—Yellow Banks Drainage District, R. C. Burke, president, awarded contract to O. O. McDonald & Co., Collinston, La., for construction of two drainage ditches (Yellow Bank and Cypress); levee will be 15 miles long, constructed alongside of Cypress Canal and will drain 65,000 acres of farm land; district will issue \$85,000 worth of bonds to cover cost of construction, work to begin in 30 days; contract was awarded to R. E. & G. A. McWilliams of Walnut and Chicago, Ill., for construction of canal to drain surface waters of Helena into Long Lake. (Previously mentioned.)

Ark., Osceola.—Mississippi county will construct 75 miles of drainage canals; about 3,170,000 cubic yards; bids to be opened July 26; Willis E. Ayres, chief engineer, Randolph Bldg., Memphis, Tenn. (See "Machinery Wanted.")

Tex., Portland.—Charles P. Taft of Cincinnati, O., and associates are reported as planning construction of drainage system, with John G. Willacy of Corpus Christi, Tex., in charge of work. (See "Miscellaneous Enterprises.")

Va., Norfolk.—Finance committee of City Council approved appropriations for drainage system; \$13,752 for Cumberland St. drain; \$2340 for Channel St.; \$1860 for drain between Redgate and Westover Aves.

ELECTRIC LIGHT AND POWER

Ala., Birmingham.—Sloss-Sheffield Steel & Iron Co. will erect power plant at Sloss for operation of water pumps to be installed to handle heavy water flow at mines; pumps to be electrically driven; power plant will also be used for electrification of mines; contracts for machinery and equipment reported awarded; estimated cost \$40,000; construction begun.

Ark., Hamburg.—Hamburg Improvement District Board Commissioners will install electric-light plant and water-works.

Ala., Montgomery.—City awarded contract to Montgomery Light & Water Power Co., R. J. Chambers, general manager, to furnish electric-power for operation of city water-works; installation will be completed within few months; estimated that output of water will reach daily average of 8,000,000 gallons within few years. (Recently noted.)

Ark., Morrilton.—Morrilton Light & Power Co. incorporated with \$20,000 capital stock by Williams L. Moore, Clifton Moore and G. H. Burr.

Ala., Opelika.—City has voted issuance of \$5,000 bonds for construction of electric-light plant and water-works. Address The Mayor. (Lately mentioned.)

Ark., Nashville.—City granted franchise to J. C. Stephenson Lumber Co. of Nashville to furnish electric lights.

Fla., White Springs.—City contemplates vote on \$45,000 bond issue for lighting plant, sewerage, water-works, etc.; G. S. Mobley, Mayor. (See "Water-Works.")

Ga., Dalton.—H. S. Jaudon Engineering Co., Savannah, Ga., has completed plans and specifications for electric-light plant; equipment will include compound-condensing engines direct connected to generators; capacity 500 horse-power. (See "Water-Works.")

Md., Baltimore.—Susquehanna Transmission Co., James Young, local engineer, Continental Bldg., is progressing with construction of transformer plant heretofore announced; building nearing completion and will be equipped with electrical machinery for transforming electricity to be transmitted from Susquehanna River development at McCall's Ferry (Pennsylvania) of Pennsylvania Water & Power Co., 24 Exchange Pl., New York; this company understood to have contract to furnish 25,000 horse-power to Consolidated Gas, Electric Light & Power Co., Continental Trust Bldg., Baltimore; Susquehanna Transmission Co. transmission lines are under construction and will be 40 miles long, with 40 to 60-foot steel towers carrying cables; understood transformer station capacity will be 150,000 volts. (Details of McCall's Ferry and Susquehanna companies reported previously.)

Md., Elkton.—City defeated \$75,000 bond issue for constructing electric-light, sewer and water systems. Address The Mayor. (Recently mentioned.)

Md., Frederick.—Frederick Railroad Co. and Hagerstown Railway Co. have commissioned P. O. Kellholtz, Continental Bldg., Baltimore, Md., to prepare plans and specifications for joint power-house.

Mo., Kansas City.—Big Nangua Hydro-Electric Co. incorporated with \$150,000 capital stock by R. E. Bremer, P. M. Bremer and H. M. Bremer.

Okla., Durant.—City will install electric-lighting plant. Address The Mayor.

Okla., Foss.—City contemplates installation of electric-lighting system. Address The Mayor.

S. C., Charleston.—Mayor R. H. Rhett appointed special committee to select engineers to estimate cost of constructing electric-light plant.

S. C., Ellorree.—City will vote July 22 on issuance of \$5000 bonds for erecting electric-light plant.

S. C., Greenville.—Home Light & Power Co. incorporated with \$100,000 capital stock by J. Thomas Arnold, Jos. A. McCullough, J. M. Geer, Lewis M. Parker and others; has franchise for electric lighting.

S. C., Lexington.—James V. Jackson of Augusta, Ga., and associates are reported as having purchased and as to develop Dreher

Shoals by construction of water-power-electric plant.

Tenn., Cleveland.—Eastern Tennessee Power Co. chartered with \$1,750,000 capital stock by J. D. Alsop, H. C. Beck, Sherman Beck and R. L. Westcott of Chattanooga, Tenn., and Henry Crumbliss of Kingston; understood company will own water-power-electric plant mentioned recently as to be constructed by J. G. White & Co., 43 Exchange Pl., New York; develop 30,000 horse-power at first and 20,000 additional in future. (Other details lately mentioned.)

Tenn., Decherd.—City has awarded contract for electric-light and water-works system. Address The Mayor.

Tenn., Knoxville.—Knoxville Railway & Light Co. will erect addition to power-house, to cost about \$8000; will install 5000-kilowatt turbine.

Tenn., Lexington.—C. P. Wilson applied to Council for franchise to construct electric-light plant.

Tex., Bryan.—City is considering proposition to establish electric-light, water and sewer system; cost \$100,000. Address The Mayor.

Tex., Devine.—Burnett & Fenneman, Indianapolis, Ind., will install electric-light plant and ice factory.

Tex., Gordon.—Gordon Water, Light & Ice Co. (recently reported incorporated by J. J. Rice and others) contemplates installation of light plant next year; W. S. Dawson, secretary.

Tex., LaPryor.—LaPryor Water & Light Co. incorporated with \$8000 capital stock by W. G. Bates, D. A. Harrison and R. L. Couser.

Va., Middlethian.—Richmond Power Corporation chartered with \$500,000 capital stock by S. Dabney Crenshaw and Levin Joyner of Richmond, Va.; F. W. Meulen, St. John Clarke and Henry B. Twombly of New York; plans construction of plant (using as fuel coal from mines) to transmit electricity for power to Richmond, Petersburg and Norfolk; install initial unit of 10,000 horse-power; plant details not determined. Address Mr. Crenshaw at Richmond.

W. Va., Wheeling.—Consumers' Electrical Co., 51 16th St., plans construction of power plant to cost from \$700,000 to \$900,000; engineers are working on plans; ordinance committee of City Council is considering granting of electric-light franchise to company.

FERTILIZER FACTORIES

Ala., Birmingham.—Birmingham Slag Co. incorporated to manufacture fertilizers, etc.; Solon Jacobs, president. (See "Miscellaneous Factories.")

Ala., Foley.—Foley Fertilizer Co., A. L. James, manager, will make improvements recently mentioned; build 60x100-foot addition at cost of \$2000, and install fertilizer-mixing, feed-grinding machinery, etc. (See "Machinery Wanted.")

Fla., Meadows.—Florida By-Products Co., main office Atlanta, Ga., will establish fertilizer factory.

Mo., Kansas City.—American Reduction & Fertilizer Co., 19th and Wyoming Sts., will rebuild plant reported burned; loss \$10,000.

N. C., New Berne.—New Berne Cotton Oil & Fertilizer Mill's addition to factory, recently noted, will be 60x80 feet; mill construction; company's force will erect; no further machinery needed.

FLOUR, FEED AND MEAL MILLS

Ala., Foley.—Foley Fertilizer Co., A. L. James, manager, will install feed-grinding machinery. (See "Fertilizer Factories" and "Machinery Wanted.")

Ark., Shaw.—Company organized with J. H. O'Kelley president to establish grist mill, etc. (See "Cotton Compresses and Gins.")

Ky., Bowling Green.—Willford Milling Co. incorporated with \$15,000 capital stock by M. A. Willford, R. D. Reynolds and D. P. Browning.

N. C., Durham.—Carolina Roller Mills Co. changed name to Austin-Heaton Co., increased capital stock and will enlarge plant.

N. C., Landis.—Landis Milling Co. incorporated with \$25,000 capital stock to establish roller flour mill; Dr. B. O. Edwards, president; O. L. Linn, vice-president; G. H. Corrier, secretary-treasurer; building plans not decided; will soon be ready for machinery bids. (See "Machinery Wanted.")

Tex., Justin.—Justin Mill & Elevator Co. incorporated with \$30,000 capital stock by E. E. Bewley, M. P. Bewley, Jule G. Smith and Bert K. Smith.

Va., Blacksburg.—Milling & Supply Co., recently reported incorporated with \$20,000

capital stock, will succeed Blacksburg Power & Supply Co.; will handle all kinds of farm products and implements; C. A. Crumpacker, president.

FOUNDRY AND MACHINE PLANTS

Ark., Little Rock.—Rotary Engines.—Nichols International Rotary Engine Co. incorporated by S. R. Nichols, W. S. May, J. F. Hammett and others.

Ga., Atlanta.—Withers Foundry & Machine Co. incorporated with \$80,000 capital stock by Walter G. Withers, W. T. Withers and J. B. Withers.

Miss., Natchez.—Iron Foundry.—C. T. Shaw will enlarge and improve iron foundry.

Miss., Iuka.—Flows.—J. W. Hiett will, it is reported, establish plant to manufacture plows and harrows; expended \$8000 for machinery, buildings, etc.

Mo., St. Louis.—Pratt-Messler Manufacturing Co., 2700-2704 South 7th St., will enlarge and improve foundry; reported additional buildings will cost \$6000.

Mo., St. Louis.—Turley Gear & Machine Co. incorporated with \$25,000 capital stock by H. G. Turley, Anthony F. Rieth and W. A. Turley to manufacture and deal in machinery.

Okla., Delmar Heights.—P. O. Oklahoma City.—M. C. Clark is proceeding with erection of two foundry buildings; will be occupied by Imperial Iron & Foundry Co.

Okla., Oklahoma City.—Sashweights, etc.—Central Sashweight & Foundry Co. incorporated with \$25,000 capital stock by Max K. Weigel, Wellington, Kans., and J. J. Augustine, Oklahoma City.

Tex., San Angelo.—Iron Works.—Temple Iron Works, Temple, Tex., will establish \$15,000 foundry at San Angelo; has site 75,000 feet square.

GAS AND OIL DEVELOPMENTS

Ala., Birmingham.—Alabama United Oil & Gas Co., J. B. Stagg, secretary, 613 Farley Bldg., recently reported incorporated with \$1,000,000 capital stock, will develop 2000 acres of gas and oil land; drill 3500 feet; pipe gas to Memphis, Tenn., 100 miles, and to Gadsden, Ala., 75 miles; Robert P. Zell, engineer in charge; applied for franchise to furnish Columbus, Miss., with natural gas.

Ala., Fayette.—Cosmos Oil & Gas Co. incorporated with \$30,000 capital stock; G. B. Crowe, president; J. L. Davidson, secretary; H. J. Falls, vice-president.

Tex., Ennis.—City granted franchise to North Texas Gas Co. to install natural-gas system, piping gas from Henrietta field.

Tex., Houston Heights.—Gas.—Suburban Gas Co. incorporated with \$100,000 capital stock by H. W. Bennett, Willis Morris and J. W. Foote; has franchise to furnish city with gas and applied for franchise to lay mains in suburbs of Chaneyville and Bruner; will erect plant with one storage tank with capacity of 100,000 cubic feet of gas; cost \$75,000.

Tex., Houston.—The Texas Company has awarded contracts for 200 miles six and eight-inch steel pipe for new oil-pipe lines in Southwest; understood contract for 100 miles eight-inch pipe received by National Tube Co., Pittsburg, Pa., and that contract for 100 miles six-inch pipe will be awarded to La Belle Iron Works, Steubenville, O.; this piping for proposed trunk line from Caddo field, near Shreveport, La., to Port Arthur, Tex. (Mentioned July 13.)

W. Va., Clarksburg.—Guy Oil & Gas Co. incorporated with \$10,000 capital stock by W. G. Trickick, H. M. Heouner, J. E. Williams and others.

W. Va., Charleston.—Conner Oil & Gas Co. incorporated with \$25,000 capital stock by C. R. Conner, H. L. Lambert, E. J. McKinley and others.

W. Va., Mt. Clare.—Fifth Sand Gas Co. incorporated with \$50,000 capital stock by D. W. Cook of Mt. Clare, T. F. Koblegard, T. A. Whelan and J. A. Barnes of Weston, W. Va.

W. Va., New Martinsville.—Alpha Oil & Gasoline Co. (recently noted incorporated) will manufacture gasoline from natural gas. (See "Miscellaneous Factories.")

W. Va., Williamson.—Mingo Oil & Gas Co. incorporated with \$50,000 capital stock by M. Z. White, B. B. Golgs, John A. Sheppard and others.

ICE AND COLD-STORAGE PLANTS

Fla., Tampa.—Fred G. Perry of Tampa and J. S. Hamlett of Tennessee will establish ice and refrigerating plant; purchased machinery for manufacturing ice from double distilled water; capacity 50 tons daily.

Ga., Atlanta.—Fulton Market Co. will install cold-storage plant; cork insulation, direct-expansion ammonia system; electrically-driven compressor and double-pipe condenser; L. J. Hill, Jr., architect, 313 Century Bldg., Atlanta, may be addressed.

Ky., Lexington.—Lexington Cold Storage Co. incorporated with \$20,000 capital stock by G. B. Hawkins, Leon Renaker and M. J. Toohy.

La., De Ridder.—Hudson River Lumber Co., R. A. Long, president (recently noted to rebuild burned ice plant), will erect \$40,000 mill-construction building; daily capacity of plant, 45 tons; known as Crystal Ice Plant.

Md., Baltimore.—American Ice Co., 309-19 Calvert Bldg., will erect ice plant and depot at Franklin St., between Payson, Pulaski and Smallwood Sts.

Miss., Charleston.—Charleston Cold Storage Co. incorporated with \$20,000 capital stock by S. J. Baker, W. F. Lambert, C. E. Harris and others.

Tex., Devine.—Burnett & Fenneman, Indianapolis, Ind., will install ice factory and electric-light plant.

Tex., Terrell.—Arkansas & Texas Consolidated Ice & Coal Co., Marshall, Tex., J. Hicks, president, Pine Bluff, Ark., will not establish ice plant; recent report incorrect.

Tex., Cooper.—Arkansas & Texas Consolidated Ice & Coal Co., Marshall, Tex., J. Hicks, president, Pine Bluff, Ark., will not establish ice plant; recent report incorrect.

LAND DEVELOPMENTS

Ala., Birmingham.—American Co-operative Realty Co. incorporated with \$40,000 capital stock; Leroy Smith, president and treasurer.

Ala., Birmingham.—Turkey Creek Land Co. incorporated with \$16,000 capital stock by A. W. Smith, F. M. Jackson and D. T. Smith.

Ala., Birmingham.—Palmetto Land Co. incorporated with \$4800 capital stock; J. T. Foster, president; Burr Nabers, Jr., vice-president; Henry Howze, secretary-treasurer.

Ala., Birmingham.—Silver Mead Land Co. incorporated with \$10,000 capital stock; A. Griggs, president and treasurer; W. W. Ransom, vice-president; T. M. Bradley, secretary.

Ga., Atlanta.—Coffield Investment Co. is proceeding with development of Hammond residence park near Atlanta; 150 acres divided into about 450 lots; some manufacturing sites; winding roads are being graded.

Ga., Dawson.—Dawson Development Co. incorporated with \$25,000 capital stock by J. A. Harsley and others.

Mo., St. Louis.—Glasgow estate will develop Chain of Rocks farm for residence section; will plat and subdivide into two-acre tracts; construct 100-foot boulevard along bluff and one east and west through property; improve with parkway drives, etc.; cost of improvements, \$50,000.

Okla., Altus.—Bante Development Co. incorporated with \$10,000 capital stock by Henry F. Bante, John A. Schmeleir and Geo. H. Hillemeier, all of St. Louis, Mo.

Okla., Tupelo.—Tupelo Development Co. incorporated with \$10,000 capital stock by Robert E. Calloway, John R. Hadley, Robert E. Fowler and others.

S. C., Cheraw.—Pageland Land Co. incorporated with \$9000 capital stock by W. M. Gidfrey, J. W. Maynard and D. N. McGregor.

S. C., Simpsonville.—Piedmont Farm Co. incorporated with \$60,000 capital stock by P. S. Dew and H. P. Dew.

Tenn., Bristol.—Rural Home Land Co. incorporated with \$10,000 capital stock by W. S. Bare, W. D. Lyon, R. E. Stevens and others.

Tex., Beeville.—Two River Ranch Co., Wichita, Kans., purchased "Kerr Ranch" of 44,000 acres, 45 miles west of Beeville; propose to sectionize; subdivision will be begun at once under supervision of Ehrenborg & Johnson, engineers, 518 Gibbs Bldg., San Antonio, Tex.

Tenn., Memphis.—Mathes & Duntze Timber & Land Co. incorporated with \$25,000 capital stock by Charles Duntze, J. A. Mathes, H. S. Shaw and others.

Tex., Friona.—Citizens' Co-operative Development Co., C. C. Fredericks, president, recently noted to develop manufacturing section, construct water-works, sewerage, electric-light plant, etc., has engaged Jacob Tiedel, Friona, as architect; no further plans announced.

Tex., Galveston.—Bay View Land Co. incorporated with \$14,000 capital stock by J. C. Wenan, C. J. Michaels and Otto Letzerich.

Tex., Sutherland Springs.—Sutherland Springs Town & Land Co. incorporated with

\$100,000 capital stock by J. L. Kerr, I. T. Fryor and H. M. Townsend.

Va., Capron.—Vincent & Drewry are proceeding with development of 3000 acres of land; subdivide into small farms and erect dwellings; secured several small mills for cutting building timber. Mr. Vincent will develop in same way about 3000 acres.

Va., Norfolk.—Tarrant Water Front Corporation incorporated with \$20,000 capital stock; B. R. Kennon, president; George Piche, vice-president; George Lindsey, secretary-treasurer.

LUMBER MANUFACTURING

Ark., Corning.—Star Ranch & Lumber Co., Neeleyville, Mo., has purchased timber land in Clay county for \$50,000; will install stave plant and sawmill.

Ark., Texarkana.—Texarkana Shingle Creosoting Co., J. C. Pate, president, contemplates constructing shingle mill to have daily capacity of several million shingles. (See "Miscellaneous Factories.")

Fla., Freeport.—Baker-Wakefield Cypress Co., H. L. Baker, president, Plattenville, La., purchased cypress property of J. J. McCaskill Company, together with mill, planer, drykilns, logging equipment, etc.; purchase price, \$375,000.

Fla., Freeport.—H. L. Baker, Plattenville, La., and others have acquired from J. J. McCaskill Company sawmill properties and 30,000 acres of cypress land; will increase output of plant.

Fla., Middleburg.—Middleburg Lumber Co. incorporated with \$25,000 capital stock; Edward S. Spencer, president; Lincoln E. Spencer, vice-president; Edgar L. De Witt, treasurer, all of Jacksonville, and George A. Chalker of Middleburg, secretary.

Ky., Hazel.—Carnahan-White Lumber Co., Winchester, Ky., will erect band mill and develop timber land; will construct railroad 12 miles long.

Ky., Madisonville.—Star Planing Mill Co. incorporated with \$20,000 capital stock by L. W. Schmetzer, G. T. Bell and J. H. Orsburn.

La., Forest Hill.—Crowell & Spencer Lumber Co. will erect additional mill; will add seven-acre pond; construction begun.

La., Jena.—River Land & Lumber Co. purchased about 30,000 acres of timber land in Catahoula parish for \$500,000.

Miss., Arm.—Meadows-Steinweg Lumber Co. incorporated with \$25,000 capital stock by J. W. Meadows, C. A. C. Steinweg and others.

Miss., Benton.—Link-Newcomb Mill & Lumber Co. (recently noted to install mill) has purchased 1100 acres cottonwood timber land on Mississippi River in Claiborne county; price \$42,000; within 12 months will erect band mill of about 25,000 feet daily capacity.

Miss., Brookhaven.—Central Lumber Co. increased capital stock from \$50,000 to \$100,000.

Mo., Dexter.—Dexter Lumber Co. (recently noted) was incorporated by R. L. Ladd, W. F. Tiller and J. B. Buck; \$10,000 capital stock. (Recent notice slightly incorrect.)

N. C., Belhaven.—Woodside Lumber Co. incorporated with \$25,000 capital stock by W. S. Riddick and Milson Windley of Belhaven, and W. B. Allen of Philadelphia, Pa.

S. C., Allendale.—A. A. Richardson (recently noted to install steam plant in connection with lumber mill and ginney) will erect 80x50-foot sawmill, 40x30-foot ginhouse and 20x25-foot shingle mill; construction by owner; will install machinery; daily capacity 10,000 shingles, 15,000 feet of lumber and 20 bales of cotton. (See "Cotton Compresses and Gins.")

Tenn., Bristol.—Paxton Lumber Co. will purchase timber boundary and install band mill.

Tenn., Chattanooga.—Taylor Lumber Co. incorporated with \$40,000 capital stock by Z. K. Taylor, F. H. Taylor, O. C. Ross and others.

Tenn., Memphis.—Mathes & Duntze Timber & Land Co. incorporated with \$25,000 capital stock by Charles Duntze, J. A. Mathes, H. S. Shaw and others.

Tenn., Memphis.—Ryan-Weigant Lumber Co. incorporated with \$10,000 capital stock by James J. Ryan, J. F. Weigant, Ralph May and others.

Tex., Clevenger.—J. P. Clevenger will rebuild lumber plant recently reported burned; will erect 60x120-foot building; mill construction; cost \$2500; erection by owner; bids for machinery costing \$12,500 to be opened within few days; daily capacity, 45,000 feet, log scale, yellow pine and hardwood timber and long-leaf. (See "Machinery Wanted.")

Tex., Neches.—Neches Lumber Co. has increased capital stock from \$40,000 to \$100,000.

METAL-WORKING PLANTS

Ark., Texarkana.—Sheet Metal.—Tennison Bros., Laurel and 3d Sts., will install machinery for manufacturing metal pails, oil cans, etc.

Ga., Savannah.—Turpentine Cups.—American Can Co., main office 447 West 17th St., New York, will erect addition to plant at Savannah, providing for manufacture of several thousand turpentine cups daily. E. R. Phillip is Savannah representative.

MINING

Ark., Pike County.—Diamonds.—Kimberlite Diamond Mining & Washing Co. incorporated with \$200,000 capital stock by Eugene H. Abadie of Kirkwood, Mo. (president); Austin O. Miller of Murfreesboro, Ark.; W. Franklin Armstrong, 4210 Delmar Blvd., St. Louis, Mo.; Robert B. Snow of Ferguson, Mo., and others; develop diamond deposits on 251 acres of land in Pike county.

Ga., Atlanta.—Herbert Wiggs, secretary and treasurer Broad River Granite Co., advises that crushing plant, etc., at Oglethorpe is not contemplated; company is planning erection of large finishing plant in Atlanta, to be devoted exclusively to granite. (Recent report incorrect.)

Ga., Atlanta.—Clay, etc.—Southern Mining Co. incorporated with \$10,000 capital stock by W. E. Cantrell, E. J. Johnson and T. D. Meador, Jr.

Mo., Boonville.—Sand and Gravel.—Missouri River Sand & Gravel Co. incorporated with \$100,000 capital stock by C. Meierhoffer of Boonville, N. J. Booth, St. Louis, Mo., and others.

Mo., Hollister.—Lead and Zinc.—Tri-State Mining Co. of Springfield, Mo., incorporated with \$600,000 capital stock; purchased 1200 acres of land near Hollister and will develop lead and zinc deposits; purchased machinery for prospecting and lumber for 20 houses to be erected for employees.

Mo., Joplin.—Lead and Zinc.—Sitting Bull Lead & Zinc Mining Co., J. M. Short, manager, R. F. D. No. 3, Galena, Kans., will open bids after September 1 on machinery for plant recently noted. (See "Machinery Wanted.")

Mo., Joplin.—Zinc and Lead.—Niagara Falls Zinc & Lead Co. incorporated with \$50,000 capital stock by C. Howard Fisher, Charles W. Pattison and Francis W. Griffith.

Mo., Joplin.—Lead and Zinc.—Durstun Mining Co. increased capital stock from \$48,000 to \$155,000.

Va., Elkton.—Manganese.—Rockingham Mining Co. will develop manganese deposits in Harnsberger mines.

Va., Richmond.—Gold.—Scotia Gold Mining Corporation, W. P. Arwood, assistant manager, Box 202, is developing 173 acres in Fluvanna county containing gold-bearing quartz; present daily capacity eight tons ore; contemplates increasing capacity to 25 or more tons daily; when mine is fairly developed will probably install 30-stamp mill and cyaniding plant.

W. Va., Edgwood, P. O. Wheeling.—Limestone.—Wheeling Limestone Co. awarded contract for furnishing and installing two Austin stone crushers; capacity, 400 tons of stone daily.

MISCELLANEOUS CONSTRUCTION

Fla., Fort Barrancas.—Henry Monk, Pensacola, Fla., recently noted as lowest bidder at \$14,964, has been awarded contract for erecting quartermaster's wharf. (See "Machinery Wanted.")

Fla., Jacksonville.—Docks, etc.—Florida Warehouse & Dock Co. incorporated; Frank Drew, president, Live Oak, Fla. (See "Warehouses.")

Fla., Key West.—Quay.—Wm. H. Beecher, commander Naval Station, has orders to proceed with construction of quay wall, for which \$137,500 was appropriated; quay will be constructed in front of new fill, giving berthing space to vessels drawing not over 30 feet of water; berthing space will be afforded for space of 1200 feet to accommodate flotillas of 20 or more torpedo boats.

La., New Orleans.—Levee Earthwork.—United States Engineer's office will receive bids until August 15 for 257,000 yards of earthwork; H. Burgess, Major, Engineers (See "Machinery Wanted.")

Tenn., Memphis.—Levee.—Bids will be opened August 1 for construction of 226,000 cubic yards levee work in Upper Yazoo levee district; M. L. Walker, Major, Engineers. (See "Machinery Wanted.")

Tex., Soudrift.—Wharf.—St. Louis, Browns-ville & Mexico Railroad, E. C. Burgess, engineer of construction, Kingsville, Tex., will erect wharf extending 500 feet into San Au-

tonio Bay; 36 feet in width; construction begun.

Va., Norfolk.—Docks.—Central Water Front Corporation, J. W. Perry, president, purchased 7½ acres on Tarrant's Creek and will improve by dredging and building two docks into property, providing about 1200 feet of water front. (Company recently reported incorporated with \$100,000 capital stock.)

Va., Richmond.—Dam.—City will rebuild dam at Young's pond recently destroyed by flood; Charles E. Bolling, City Engineer.

Va., Richmond.—Wharf and Bulkhead.—Council Committee on Improvement of James River recommended award of contract to Alsop & Pierce, Newport News, Va., at \$24,000 for construction of wharf and bulkhead along water front at mouth of Gillie's Creek; plans and specifications prepared by Charles E. Bolling, City Engineer. (Recently mentioned.)

W. Va., Huntington.—Monuments.—Bailey Post, Grand Army of Republic, is planning erection of soldiers' and sailors' monument; estimated cost, \$7000.

MISCELLANEOUS ENTERPRISES

Ala., Anniston.—Garage.—L. G. Jones will remodel building for garage.

Ala., Birmingham.—Ledger Publishing Co. incorporated with \$100,000 capital stock; Jas. J. Smith, president; Geo. M. Cruikshank, first vice-president; Robert G. Hiden, second vice-president; Thomas B. Smith, secretary; Anthony A. Smith, superintendent; succeeds Ledger Publishing Co. and will publish Birmingham Ledger.

Ala., Ensley.—Plumbing.—Home Plumbing Co. incorporated with \$2500 capital stock; J. A. Wellington, president; W. H. Chichester, vice-president; A. C. Ricks, secretary; W. H. Stewart, treasurer.

Ala., Gadsden.—Coffee Roasting.—William H. Foster, Gadsden, Ala., contemplates installation of coffee-roasting outfit. (See "Machinery Wanted.")

Ala., Tuscaloosa.—Publishing.—Tuscaloosa News Publishing Co. organized; Sam F. Clabaugh, president; Robert T. Mahors, vice-president; Leon C. Bradley, secretary-treasurer; leased space in Masonic Temple and will install newspaper equipment, consisting of Cottrell new series two-revolution high-speed seven-column quarto press, linotype machine, etc.

Ark., Helena.—C. M. Young, Pine Bluff, Ark., purchased Helena Daily News; will, it is reported, install new machinery and make other improvements.

Fla., Jacksonville.—Construction.—Florida Construction & Realty Co. will be incorporated by Frank Drew, Geo. L. Drew, Geo. M. Powell and others; to construct railroads, bridges, etc.

Fla., Plant City.—Publishing.—Plant City Courier, Wayne Thomas, editor and proprietor, will install new plant to replace one reported burned.

Ga., Augusta.—Poultry and Stock Farm.—Columbia Poultry and Stock Farms incorporated with \$15,000 capital stock by A. Bindewald, J. T. Sherson and W. A. Bindewald.

Ga., Savannah.—Fertilizer Agencies.—Fertilizer Agencies Co., recently noted incorporated (under "Fertilizer Factories") by R. W. Heard and T. C. Myers, will conduct fertilizer agency; capital stock \$2500, with privilege of increasing to \$50,000.

Ga., Sylvania.—Laundry.—J. C. White will establish small steam laundry. (See "Machinery Wanted.")

Ga., Thomson.—Printing Plant.—Thos. E. Watson, Atlanta, Ga., editor of Weekly Jeffersonian and Watson's Magazine, awarded contract to J. J. Crocker, Thomson, for erection of printing plant to cost \$25,000.

Ky., Louisville.—Coffee.—Merchants' Coffee Co. incorporated with \$10,000 capital stock by Hesse Runyan, F. P. Kirzinger, L. L. Creasy and James B. Fritz.

Ky., Louisville.—Automobiles.—Broadway Auto Co. incorporated with \$10,000 capital stock by Owen S. Motteler, Walter E. Huffaker and others.

Ky., Paducah.—Laundry.—Paducah Laundry Co. increased capital stock from \$18,500 to \$34,000.

La., Jennings.—Construction.—Jennings Construction Co. incorporated with \$50,000 capital stock; G. B. Zigler, president; D. Hebert, first vice-president; H. A. Houssiere, second vice-president; C. D. Andrus, secretary; W. B. Conover, treasurer; E. P. Fox, general manager.

Md., Baltimore.—Laundry.—Regal Laundry, Inc., Gilmore and Mosher Sts., increased capital stock from \$25,000 to \$50,000.

Md., Cumberland.—Builders' Supplies.—Builders' Supply Co. (recently reported in-

corporated to establish crushing plant and deal in building supplies) will erect two buildings; 40x30 feet; one fireproof; one mill construction; no contracts; manager will supervise construction; machinery purchased.

Miss., Houston.—Race Track.—Chickasaw County Fair Association will construct standard association race track; half a mile long; surveying and grading by Gordon L. Green of Aberdeen, Miss.

Mo., Excelsior Springs.—Publishing.—Journal Publishing Co. incorporated with \$2000 capital stock by J. W. Hyder, William Morse and W. E. Templeton.

Md., Frederick.—Abattoir.—Frederick Abattoir Co. is having plans prepared by P. A. Kley, 1535 Chestnut St., Philadelphia, Pa., for proposed abattoir, etc.; will equip with slaughtering and meat-packing equipment.

Mo., Kansas City.—Automobiles.—Chalmers Motor Co. incorporated with \$25,000 capital stock by W. S. Keeler, John A. Nelson and John Price.

Mo., St. Louis.—Machinery and Supplies.—R. Kelly Hawk Supply Co. incorporated with \$10,000 capital stock by R. Kelly Hawk, Herman Ernest, Vincent McShane and others.

Mo., St. Louis.—Plumbing, etc.—J. Sheehan Plumbing Co. incorporated with \$300 capital stock by Jeremiah Sheehan, Jeremiah Sheehan, Jr., and others.

Mo., St. Louis.—Automobiles.—Lane-Lynch Motor Co. incorporated with \$15,000 capital stock by Harry P. Lynch, John A. Johansen and Geo. E. Lane.

N. C., Greensboro.—Hardware.—Grissom-Sykes Hardware Co. incorporated with \$25,000 capital stock by W. L. Grissom, R. J. Sykes, Hyatt Grissom and others.

N. C., Swansboro.—Transportation.—T. H. Pritchard Transportation Co. incorporated with \$50,000 capital stock by T. H. Pritchard and others.

N. C., Wagram.—Hardware.—Scotland Hardware Co. incorporated with \$50,000 capital stock by W. L. Trotter and others.

Okla., Muskogee.—Construction.—Southland Construction Co. incorporated with \$16,000 capital stock by J. M. Jemison, T. J. Murphy and Guy Nelson, all of Denison, Tex.

Okla., Rentiesville.—Farmers' Supplies.—Rentiesville Farmers' Supply Co. incorporated with \$5000 capital stock by F. P. Brimmon, G. H. Warren and Daniel King.

Okla., Oklahoma City.—Laundry.—D. L. Parrish of St. Louis, Mo., awarded contract to Western Construction Co. for erection of laundry.

S. C., McColl.—Publishing.—Marlboro Times Co. incorporated with \$3000 capital stock by O. E. Crowson and others; will publish newspaper.

S. C., Varnville.—Hardware, etc.—Varnville Hardware & Supply Co. incorporated with \$15,000 capital stock; L. R. Dowling, president; E. F. Warren, vice-president; A. R. Spears, secretary-treasurer.

Tenn., Athens.—Construction.—Ocoee Construction Co. incorporated with \$100,000 capital stock by H. C. Beck, J. D. Alsop, R. L. Westcott and others.

Tenn., Blountville.—Steam Laundry.—American Steam Laundry Co. incorporated with \$10,000 capital stock by E. H. Kabler, W. F. Kabler, H. F. Henderson and others.

Tenn., Chattanooga.—Grain Elevator.—Board of Public Works will receive bids until July 26 for erection of grain elevator on the wharf leased by Tennessee Navigation Co.

Tenn., Memphis.—Printing Plant.—C. B. Johnston & Co., 322 South Main St., will erect printing plant at Pontotoc Ave. and Mulberry St.; two stories; concrete; 70x30 feet; fireproof; cost \$25,000.

Tenn., Memphis.—Automobiles.—E. M. F. Memphis Company incorporated with \$25,000 capital stock by Walter E. Flanders, Robert M. Brownson, B. Wyckliffe Tyman and others.

Tex., Checotah.—Hay and Grain.—Checotah Hay & Grain Co. incorporated with \$10,000 capital stock by M. L. Martin, A. L. Martin, R. O. Smith and others.

Tex., Fort Worth.—Printing.—Reimers Printing Co. incorporated with \$60,500 capital stock; takes over Keystone Printing Co. at 208-10 Houston St.; will erect building adjoining Reimers plant, making total floor space of 200,000 square feet; will operate plants separately for present.

Tex., Houston.—Decorating.—Bullock Decorative Shops incorporated with \$10,000 capital stock by W. B. Sharp, P. B. Tallman and J. E. Bullock.

Tex., Portland.—Charles P. Taft of Cincinnati, O., and associates are reported as plan-

ning expenditure of \$500,000 for summer and winter resort; improvements to include drilling two artesian wells and construction of water-works, sewerage system, drainage system and dam to provide lake 1 1/4 miles long, 20 feet deep and 600 feet wide; automobile loop, etc., and erection of hotels, pavilions and bathhouses; understood John G. Willacy of Corpus Christi, Tex., has three-year contract to direct work.

Va., Richmond—Park Improvements.—City will expend \$3000 for converting courthouse square into park. Address The Mayor.

Va., Richmond—Publishing.—Odd Fellows' Publishing Co. incorporated with \$10,000 capital stock; Charles Pohlitz, president; Hill Montague, vice-president; F. C. Baggarly, secretary-treasurer; no building or machinery plans; for the present will operate by contract.

W. Va., Richwood—Publishing.—Yew-Pine Publishing Co. (recently reported incorporated with \$5000 capital stock) will erect \$4000 building; 30x50 feet; mill construction; plans and erection by W. M. Boso, Richwood; W. E. Bennette, president; G. L. Umberger, vice-president; J. K. Ward, secretary, treasurer and manager.

W. Va., Wheeling—Garage.—Wheeling Automobile Co. will erect garage; two stories; brick and steel; steam heat; main floor supported by steel trusses; accommodate 50 cars; construction under supervision of B. F. Perkins, president of company.

MISCELLANEOUS FACTORIES

Ala., Bessemer—Powder.—E. I. duPont de Nemours Powder Co. (main office, Wilmington, Del.) will erect four brick buildings equipped with powder magazines.

Ala., Birmingham—Slag Bricks.—Birmingham Slag Co. incorporated with \$20,000 capital stock; Solon Jacobs, president; J. H. Dean, vice-president; H. O. Bernhard, secretary-treasurer; will manufacture slag brick and fertilizer.

Ala., Birmingham.—Multi-copy Machines, etc.—Multi-Copy Co. incorporated with \$5000 capital stock; A. S. Boyd, president; L. M. Smith, vice-president; A. S. McElroy, secretary-treasurer.

Ark., Helena—Gas Plant.—Helena Gas Co. purchased and will install generating machine with capacity of 150,000 cubic feet daily, doubling capacity of plant.

Ark., Texarkana—Creosoting.—Texarkana Shingle Creosoting Co. incorporated with \$10,000 capital stock; J. C. Paty, president; D. J. Cavitt, vice-president; B. K. Rodgers, secretary-treasurer; will creosote pine and cypress shingles under process devised by Mr. Paty; contemplates establishment of shingle mill with daily capacity of several million shingles.

Ark., Texarkana.—Creositing.—Creosote Pole Co. incorporated with \$25,000 capital stock by B. G. Cox, F. W. Shildin and Thos. Sorsby.

Fla., Jacksonville—Drugs.—Southern Drug Manufacturing Co., Frank Adams, president, is having plans and specifications drawn under direction of Southeastern Tariff Association for fireproof building.

Fla., Tampa—Automobiles.—Sunlight Manufacturing Co., Robert Muzge, president and treasurer, is consummating plans for establishment of automobile-manufacturing plant, to be operated in connection with present gasoline-lighting systems plant; contemplates erection of three-story brick building, 200x80 feet; complete equipment of machinery to be installed.

Ga., Atlanta—Beverages.—Nova-Kola Bottling Co. incorporated with \$10,000 capital stock by E. C. Lester and others.

Ga., Atlanta—Dental Supplies.—Eberhart-Conway Co. incorporated with \$10,000 capital stock by A. O. Eberhart, W. S. Conway, C. E. Bothwell and others.

Ga., Macon—Cigars.—Jacob Fischer, 1535 Mifflin St., and John Gutel, both of Philadelphia, Pa., will establish cigar factory.

Ky., Lancaster—Medicine.—Walter Bros. & Hart Medicine Co. incorporated with \$25,000 capital stock by B. F. Walter, C. A. Walter and F. G. Hart.

Ky., Louisville—Statuary.—Grisanti Statuary Co. has plans by Fred Erhart, 405 Norton Bldg., Louisville, for four-story factory building recently noted; will let contract to local contractor for installation of boiler for steam-heating plant and kilns for drying.

Ky., Nicholasville—White Lead and By-products.—Kentucky Barytes Co. will enlarge plant to extract white lead and other by-products.

La., Alexandria—Sugar Refinery.—John A. Wogan of New Orleans, La., is reported as considering establishment of sugar refinery.

Ga., Cordele—Cigars.—A. Lopez of Montezuma, Ga., organized company to establish factory with capacity of 75,000 cigars weekly.

Miss., Meridian—Automobiles, etc.—Meridian Auto Co. incorporated with \$10,000 capital stock by Sam Meyer, J. T. Russell, Walter G. Hodges and others to manufacture automobiles, etc.

Md., Baltimore—Tooth Paste.—Professional Tooth Paste Co. incorporated with \$5000 capital stock by Frederick W. Schanze, North and Pennsylvania Aves.; Louis J. Roth and Lavina Abbott.

Mo., Kansas City—Cut Stone.—Phenix Stone & Lime Co. of 19th and Olive Sts., Kansas City, and Phenix, Mo., recently noted (under "Miscellaneous Enterprises") to increase capital stock to \$125,000, will erect mill-construction building costing \$20,000; erection by company; capacity of plant 30,000 cubic feet cut stone per month.

Mo., Kansas City—Medicine.—Vesper Medical Co. incorporated with \$10,000 capital stock by Jack C. Norman, Clarence A. Dotz and Clarence A. Marsh.

Mo., Kansas City—Stock Foods.—United States Stock Foods Co. incorporated with \$15,000 capital stock by James A. Haskell, C. H. Forsee and W. F. Tuttle.

Mo., Kansas City.—Roofing.—Neison Manufacturing Co. of Minneapolis, Minn., and Winnipeg, Manitoba, will establish branch plant at 1932 Grand Ave.; erect factory building later.

Mo., Kansas City—Drugs.—Ponayao Drug Co., 610 Broadway, will establish drug factory.

Mo., St. Louis—Food Products.—Dry Egg & Food Products Co. incorporated with \$5000 capital stock by W. H. Hippolite, Robert T. Wartman and F. C. Busche.

Mo., St. Louis—Trucks, etc.—St. Louis Truck & Specialty Co. incorporated with \$2000 capital stock by John F. Judd, William Waltering, William Berninger and others.

N. C., Wilmington—Paint and Varnish.—Atlantic Paint & Varnish Co. incorporated with \$35,000 capital stock by M. Ashley Curtis, Jr., Platt W. Davis, David C. Ray and Chas. N. Evans.

N. C., Wilmington—Paint.—Atlantic Paint and Varnish Works (incorporated) organized to manufacture paints, stains and varnishes; will make specialty of paints for agricultural implements, trunks, furniture, etc.; also shingle stains and roof paints; P. W. Davis, president; Thos. W. Pritchard, vice-president and manager; M. A. Curtis, secretary-treasurer.

Okla., Avant—Glass.—American Glass Co. (recently reported incorporated with \$25,000 capital stock) will manufacture lamp chimneys and sundry glass articles; machinery supplied; 280x100-foot main building and 100x50-foot warehouse now under construction; M. Schwartz, president and manager; J. A. Du Bose, Anniston, Ala., vice-president; J. E. Dunn, Tulsa, Okla., treasurer; A. S. Evans, secretary.

Okla., Bartlesville—Glass Bottles.—Bartlesville Bottle & Glass Co. will operate Great Western Glass Co.'s plant recently noted leased; manufacture glass bottles; daily capacity, 150 gross; Geo. Crawford, president; Jess Stewart, vice-president; Jas. W. Lynch, 519 Shawnee Ave., secretary; Wm. Schoberth, treasurer; Robert Ballentine, manager. (See "Machinery Wanted.")

Okla., Enid—Polish.—Thomas Motor Car Polish Co. incorporated by F. J. Gentry, William Froach, M. L. Thomas and R. W. Thomas.

Okla., Oklahoma City—Automobile Self-controlling Device.—C. A. McKlerman of Carthage, Mo., is promoting organization of company with \$150,000 capital stock to manufacture device, invented by Mr. McKlerman, for controlling automobiles; substitutes one lever for clutch, brake and spark.

Okla., Oklahoma City.—Farmers' Motor Wagon & Plow Co. incorporated with \$100,000 capital stock by Colfax Moulton, H. D. East and others.

S. C., Union—Overalls, etc.—L. L. Wagon, care Union Grocery Co., Main and Bachelor Sts., contemplates establishment of overalls factory, and possibly waste mill, or both combined. (See "Machinery Wanted.")

Tenn., Chattanooga—Refrigerators.—Odorless Refrigerator Co., 10th and East R Sts., awarded contract for erection of new factory building recently noted; material also practically secured.

Tenn., Chattanooga.—Blowpipe.—Ryerson Blowpipe Co., 105 Howard St., Ridgeville, Tenn., will establish blowpipe shop. Address Chas. A. Ryerson. (See "Machinery Wanted.")

Tenn., Jackson—Automobiles.—Jackson Carriage Co. purchased and will install ma-

chinery for manufacturing and repairing automobiles.

Tenn., Nashville—Drugs.—Co-operative Drug Manufacturing Co. incorporated with \$20,000 capital stock by W. Dearnold, T. B. Carroll, J. E. Mosely and others.

Tex., Amarillo—Aerial Vehicles.—Rex Aerial Navigating & Constructing Co. (organized with \$2,000,000 capital stock) contemplates establishment of headquarters and factory; location not decided; is now having first machine constructed by Al-Ed Manufacturing Co., Dayton, O.

Tex., Dallas—Automobile Tires.—Brehnan-Kaplan & Co. will erect two-story building for automobile-tire factory.

Tex., Galveston—Brewery.—M. Brock Beer Co. incorporated with \$30,000 capital stock by Moritz Brock, Sidney G. Collins and Jacob Brock.

Tex., New Ulm—Creamery.—New Ulm Creamery Co. incorporated with \$2500 capital stock by W. H. Talley, Jr., F. F. Leskar, Gus R. Voight and others.

Tex., Orange—Oil Refinery.—Webster Refining Co. incorporated with \$200,000 capital stock by C. D. Webster, W. H. Stark, F. H. Farwell and others.

Tex., Sherman—Marble and Granite.—Sherman Steam Marble and Granite Works, recently reported incorporated (under "Mining") with \$3000 capital stock, will manufacture granite and marble monumental and building work; J. A. L. Wolfe, president; H. L. Hendrex, vice-president; F. W. Hudson, secretary-treasurer. (See "Machinery, etc., Wanted.")

Va., Alexandria—Distillery.—S. E. Lindsey Distilling Co. incorporated with \$25,000 capital stock; S. E. Lindsey, president; F. L. Lindsey, secretary.

Va., Manchester—Distillery.—Broad Rock Distilling Co. incorporated with \$15,000 capital stock; J. F. Fowler, president and general manager, Manchester; J. H. Mechum, vice-president; J. M. Pugh, secretary-treasurer; both of Richmond, Va.

Va., Petersburg.—Alexander B. Murray is proceeding with plans for creamery recently noted; desires correspondence with building and machinery contractors. (See "Machinery Wanted.")

Va., Richmond—Harness and Saddlery.—Benjamin T. Crump Company incorporated with \$60,000 capital stock; J. M. Wyatt, president; T. A. Stanford, vice-president; P. A. Seaton, secretary-treasurer.

Va., Salem—Tannery.—Leas & McVitty will open bids August 5 for erection of addition to tannery recently noted; two stories; 48x112 feet; mill construction; steam heat; freight elevator; will install machinery; total cost, \$18,000.

W. Va., Bluefield—Condensed Milk, etc.—W. H. Thomas of committee of new industries of Chamber of Commerce is interested in establishment of evaporated cream and condensed milk factory.

W. Va., Moundsville—Brake Shoes for Car Wheels.—J. L. Cohagen of Washington, Pa., and W. W. Smith of Wheeling, W. Va., representing Railway Brake & Shoe Co., contemplates establishment of plant to manufacture patented brake shoes for steam and electric railroads; shoes composed of maleable-iron shell filled with secret-process composition; plan is to erect brick building 80x300 feet, one and two stories, cost \$10,000, and install \$20,000 worth of equipment.

W. Va., New Martinsville—Gasoline.—Alpha Oil & Gasoline Co. incorporated with \$25,000 capital stock by A. B. Moore, F. C. Iams, S. A. Moore and others to manufacture gasoline from natural gas which company is now producing; will install gasoline plants on several gas-producing leases.

W. Va., Parkersburg—Tannery.—T. G. Schoenberg of Cincinnati, O., proposes organization of company with \$60,000 to \$70,000 capital stock to establish tannery.

RAILWAY SHOPS, TERMINALS, ROUNDHOUSES, SHEDS, ETC.

Md., Baltimore.—Washington, Baltimore & Annapolis Electric Railway Co., 108 North Liberty St., will further enlarge freight terminals on Lombard near Howard St. to provide additional facilities for handling freight traffic between Baltimore, Annapolis and Washington.

Mo., Kansas City.—Missouri Pacific Railway, M. L. Byers, chief engineer maintenance of way, St. Louis, Mo., will, it is reported, erect railway shops in East Bottoms; 335x175 feet; buildings will include machine, boiler-repair and blacksmith shops; estimated cost \$200,000; F. E. Caldwell of Westinghouse, Church, Kerr & Co., 30 Church St., New York, is superintendent of construction.

Okla., Chickasha.—Oklahoma Central Railway, B. M. Halle, traffic manager, Purcell, Okla., will, it is reported, erect terminal buildings at Chickasha.

Tex., Quanah.—Quanah, Acme & Pacific Railway, C. E. Ensminger, general manager, will erect five-stall roundhouse.

ROAD AND STREET WORK

Ala., Birmingham.—City contemplates expenditure of \$750,000 for street improvements. Address The Mayor.

Ala., Birmingham.—City opened bids July 20 for certain asphalt binder macadam, bituminous binder macadam, bitulithic or granitoid sidewalk and gutter paving; Maury Nicholson, City Engineer.

Ala., Decatur.—Morgan County Commissioners will receive bids until August 9 for grading, draining and macadamizing Decatur-Danville road, five and one-twelfth miles; grading and macadamizing Falkville road, one and one-half miles; grading, draining and macadamizing Lacey Springs road, three miles; grading, draining and macadamizing county road (No. 2), four and five-tenths miles; J. T. Bullen, County Engineer. (See "Machinery Wanted.")

Ala., Dothan.—Houston county awarded contract at \$1000 per mile to Wifford & Whitaker for construction of 13 miles of road from Dothan to Cottonwood and from Gordon to Ashford, distance of nine miles.

Ark., Forrest City.—City will not ask bids on five miles concrete sidewalks recently noted; work will be done by local contractors; A. D. Boyle, Mayor.

Ark., Fort Morgan.—Constructing Quartermaster Lieut. Edwin F. Barlow will receive bids until August 5 for constructing brick paved road and cement walks. (See "Machinery Wanted.")

Ala., Linden.—Marengo county will vote in September on issuance of \$200,000 of bonds for road improvements. Address County Commissioners.

Ala., Selma.—Dallas county, W. S. Keller, engineer, has completed surveys for road between Selma and Burnsville and will invite bids for construction.

Ark., Little Rock.—City will pave portions of Main and 3d Sts. with vitrified brick, asphalt or creosoted blocks; Frederick Hotze and others, commissioners of improvement district.

Ark., Little Rock.—City awarded contract to Memphis (Tenn.) Asphalt Paving Co. at \$3500 for resurfacing street intersections on Center St. from 12th to 18th Sts.

Ark., Little Rock.—Pulaski and Lonoke counties will construct 14-mile turnpike from Little Rock to point near Lonoke county line; estimated cost \$100,000. Address County Commissioners of Pulaski county at Little Rock.

Fla., Fort Barrancas.—Henry Monk, Pensacola, Fla., has contract to macadamize National Cemetery Rd. from Fort Barrancas to Big Bayou; estimated cost \$15,000. (Recently mentioned.)

Fla., Pensacola.—Maxent Land Co. has awarded contract for five miles of concrete sidewalks in Maxent tract.

Fla., West Palm Beach.—Palm Beach county will construct cement sidewalk around east and north sides of courthouse and from sidewalk to steps on said sides; bids to be opened July 28; W. D. Da Camara, chairman County Commissioners. (See "Machinery Wanted.")

Fla., White Springs.—City contemplates vote on bond issue of about \$5000 for street improvements; G. S. Mobley, Mayor. (See "Water-Works.")

Ga., Clarksville.—City will receive bids until August 5 for construction of approximately 6000 linear feet of curb and gutter, 8000 square yards macadam pavement and 9000 square yards brick or concrete sidewalk; J. H. Hicks, Mayor. (See "Machinery Wanted.")

Ga., Savannah.—Chatham county will construct boulevard around Burnside Island; 19,337 feet long, having right of way 60 feet wide on highland and 200 feet wide on causeway. Address County Commissioners.

Ga., Sparta.—Hancock county (not "city," as recently reported) will vote July 23 on \$60,000 bond issue for road improvements; W. E. Wiley, clerk County Commissioners.

Ga., Elberton.—City is considering issuance of \$25,000 of bonds for macadamizing residence streets. Address The Mayor.

Ky., Lexington.—City awarded contract to Andrews Asphalt Paving Co., Hamilton, O., to pave East Main St. with Trinidad Lake asphalt; estimated cost \$60,000 to \$70,000.

La., Lake Charles.—City has voted issuance of \$360,000 bonds for streets, sewers, city hall, etc. Address The Mayor. (Lately mentioned.)

La., New Orleans.—Acting City Engineer Willis submitted report to committee on finance recommending acceptance of following bids: Standard Paving & Construction Co. of New Orleans at \$30,248.60 for construction of subsurface drains, etc., in connection with paving of Plum St., and at \$25,646.40 for construction of subsurface drains, etc., on Burdette St.; Barber Asphalt Paving Co. (main office Philadelphia, Pa.) at \$12,995 for repaving Burdette St. with asphalt; at \$12,781.90 for construction of subsurface drains in connection with paving of Bienville St.; at \$13,680.90 for paving said street; at \$36,227 for paving Alexander St. with asphalt, and at \$34,036.50 for construction of subsurface drains in same street; Southern Bitulithic Co., Nashville, Tenn., at \$9523 for paving Plum St.

La., New Iberia.—Police July of Iberia parish contemplates construction of 12 miles of road.

Md., Baltimore.—State Road Commission, John M. Tucker, chairman, Union Trust Bldg., will open bids July 27 for construction of three miles of stone macadam road in Cecil county, between Elkton and Singlerly. (See "Machinery Wanted.")

Md., Fort Howard.—Bids will be opened August 15 for constructing macadam roads, macadam resurfacing roads, concrete walks and cross-walks. Address Constructing Quartermaster. (See "Machinery Wanted.")

Md., Port Deposit.—State Roads Commission, John M. Tucker, chairman, Union Trust Bldg., Baltimore, Md., will construct macadamized road from Port Deposit to Battle Swamp, distance of three and one-half miles.

Md., Towson.—Baltimore County Commissioners awarded contract at \$500 to P. Flanagan & Sons, 120 East Lexington St., Baltimore, to open and macadamize Hillsdale Ave., between Liberty Rd. and Forest Ave.

Miss., Eupora.—City awarded contract to Oxford Concrete Co. and Frank F. Conover, Grenada, Miss., for proposed 5000 cubic yards grading, 3000 square feet crossings, 100,000 square feet sidewalks and 250 culverts; cost \$10,000. (Recently incorrectly noted.)

Miss., Grenada.—City awarded contract to Frank F. Conover, Grenada, for construction of concrete curb and gutter, sidewalks and crossings. (Recently noted.)

Miss., Gulfport.—City will receive bids until August 2 on proposed sidewalk construction; approximately 13,000 square yards; Hobart D. Shaw, City Engineer. (See "Machinery Wanted.")

Miss., Leland.—City will construct concrete sidewalks; bids to be opened August 2; R. W. Garrison, Mayor. (See "Machinery Wanted.")

Miss., Moss Point.—City will receive bids until August 1 for grading approximately five miles of city streets; C. M. Fairley, City Clerk. (See "Machinery Wanted.")

Miss., Wiggins.—City will vote August 19 on \$5000 bond issue for street improvements. Address The Mayor. (See "Machinery Wanted.")

N. C., Southport.—Town Creek township of Brunswick county will vote August 16 on issuance of \$15,000 of bonds for road improvements. Address Township Commissioners.

Okla., Oklahoma City.—City will receive bids until July 25 for grading various streets; Bob Parman, City Clerk. (See "Machinery Wanted.")

Okla., Pawhuska.—City will pave 15 blocks with asphalt. Address The Mayor.

S. C., Spartanburg.—Spartanburg county will construct six miles of road; width, 30 feet; contract to be let July 27; D. P. I. Martin, commissioner. (See "Machinery Wanted.")

Tenn., Memphis.—Turnpike Board, J. F. Williams, chairman, awarded contracts for about 30 miles of road in Shelby county as follows: W. F. McCalla—Stewartsville pike, two miles, and Brunswick pike to State Rd., three miles. O. R. Branch—Millington and Sloanville, two miles, and Locke and Cuba, two miles. W. H. Williams—Kerrville and Rosemark, one mile. J. G. Galloway—Coleman Ave., two miles. C. G. Gowan—Avenue and Bartlett, one-half mile. Baxter & Farley—Extension of old State Rd., four miles, and Collierville and Fisherville, three miles. McVey & Scruggs—Germantown and Cordova, four miles. C. E. Prescott—Capleville and Tipton, three miles; Ethelyn, Kirkland, Gaither, Nedler and Humble Aves., total of three-quarter mile; Lower Horn Lake Rd., one mile. Bids ranged from \$890 to \$1090 per mile.

Tenn., Nashville.—Board of Public Works awarded contract to Foy-Proctor Company of Nashville for curbing and sidewalk paving aggregating about \$10,000.

Tenn., Newport.—City will probably let contract to local contractors for construction of concrete sidewalks recently noted; cost \$2000; F. M. Greer, Mayor.

Tenn., Trenton.—City awarded contract to Novaculite Graveling & Paving Co., Tamm, Ill., to gravel about five miles of street, and to Ira Fitzgerald of Trenton for grading.

Tex., Abilene.—Board of School Trustees awarded contract to R. H. Locke, Abilene, for construction of cement walks around three ward buildings and high school; also cement floor in basement of high school; 12,000 square feet walks; 5300 feet flooring; cost over \$3000.

Tex., Dallas.—Collum & Bayousett of Dallas are lowest bidders at \$4234.86 for building Hubbard Trail, near White Rock Reservoir.

Tex., Dallas.—Municipal Paving Co. of Dallas is lowest bidder at \$12,862.50 for resurfacing streets which bound courthouse; J. M. Preston, City Engineer.

Tex., Galveston.—Galveston county awarded contract to J. F. Magee, Texarkana, Tex., at \$5792 to construct sidewalk and curbing from Ave. B to Ave. H; contract calls for 4000 square yards sidewalk, 2300 linear feet concrete curbing and 2350 linear feet concrete retaining curb; John M. Murch, County Auditor. (Recently mentioned.)

Tex., Longview.—City awarded contract at \$60,000 to Texas Grading Co., 114 Travis St., Houston, Tex., for constructing brick and macadam pavements on various streets. (City lately noted as receiving bids.)

Tex., Marlin.—City will construct about 58,000 cubic feet of street paving on Live Oak, Commerce and Winter Sts.; bids opened July 20; for information address Albert Levy, secretary.

Tex., Paris.—City awarded contract at \$1.83 per yard for paving Graham St. and North 15th St. with rock asphalt; contract was also awarded for paving Lamar Ave. Address The Mayor.

Tex., Taylor.—Frank Mathews, City Engineer (recently reported to prepare plans for paving Main St.), states city proposes to pave business portions with brick on concrete foundations; present 12-foot sidewalks to be widened six feet on each side, thus reducing width of present 100-foot-wide street to 64 feet; City Hall square to be made into park, with walks, band stand, fountains and flowers.

Va., Clifton Forge.—City Council is considering issuance of \$65,000 of bonds for paving streets and sidewalks, etc. Address The Mayor. (See "Sewer Construction.")

Va., Emporia.—Town Council appropriated \$5000 for street improvements.

Va., Lynchburg.—Board of Aldermen appropriated \$15,000 for improvement of Taylor, Wise and 14th Sts. Address The Mayor.

Va., North Emporia.—Town Council appropriated \$5000 for street and sidewalk improvements.

Va., Richmond.—City Council appropriated \$15,000 for improvement of streets in Washington ward; Charles E. Bolling, City Engineer.

Va., Wise.—Wise county will vote November 22 on issuance of \$700,000 of bonds for road construction. Address County Commissioners. (Recently mentioned.)

W. Va., Clarksburg.—Paving contract recently noted awarded by city to Concrete Construction Co., Suite 508, Union Trust Bldg., Parkersburg, W. Va., amounts to \$40,000; includes paving and curbing on Locust, Elm, Walnut, Washington Ave., Clay and Main Sts.; contracts for material have been let.

W. Va., Morgantown.—Monongalia County Road Commissioners will let contract in about 30 days for construction of 3000 linear feet of brick pavement, 35 feet wide, with necessary sewers, concrete curb and sidewalks; Robert D. Hennen, road engineer, Morgantown. (See "Machinery Wanted.")

W. Va., Webster Springs.—Town will, it is reported, expend \$10,000 for paving streets with concrete. Address Town Clerk.

Va., Wytheville.—Wythe county will construct three and one-quarter miles of macadam road from end of present contract east of Lynchburg turnpike from Wytheville; bids to be opened August 2; P. St. John Wilson, State Highway Commissioner, Richmond, Va. (See "Machinery Wanted.")

SEWER CONSTRUCTION

Ala., Alexander City.—City postponed date of election (recently reported) to August 17 for voting on issuance of \$5500 bonds for construction of sewers. Address The Mayor.

Fla., St. Petersburg.—City will lay 1800 linear feet of 16-inch cast-iron flange outlet sewer pipe into Tampa Bay; bids to be opened August 11; W. F. Divine, City Clerk. (See "Machinery Wanted.")

Fla., White Springs.—City defeated bond election of \$20,000 for sewerage and water-works recently mentioned; contemplates holding another election later to vote on bond issue of \$45,000 for sewerage, etc.; G. S. Mobley, Mayor. (See "Water-Works.")

Ga., Rockmart.—City will vote August 10 on issuance of \$10,000 of bonds for construction of sewer system. I. F. Mundy, Mayor.

La., Lake Charles.—City has voted issuance of \$300,000 bonds for sewers, paving, city hall, etc. Address The Mayor. (Lately mentioned.)

Md., Elkton.—City defeated \$75,000 bond issue for construction of sewer, water and light systems. Address The Mayor. (Recently mentioned.)

Mo., Dexter.—City will probably vote in August on \$40,000 or \$50,000 bond issue for construction of sewer and water-works system recently noted; Fuller-Coulit Company, Chemical Bldg., St. Louis, Mo., engineers. (See "Water-works.")

Mo., Montgomery City.—City will vote July 25 on \$14,000 bond issue for construction of sanitary-sewer system recently noted; Fuller-Coulit Company, Chemical Bldg., St. Louis, Mo., engineers.

Mo., St. Louis.—Board of Public Improvements, W. B. Dryden, secretary, awarded contract to Bambrick Bros. Construction Co., 5220 St. Louis Ave., St. Louis, to construct South Harlem joint district sewer, and to Southern Construction Co., Mermod and "T" Bldg., St. Louis, for first section of River des Peres foul-water sewer.

N. C., Asheville.—M. H. Kelly, Asheville, is proceeding with sewer and water construction for which he has contract; amount, \$12,000.

N. C., Murphy.—M. H. Kelly, Asheville, N. C., reports receiving sewer and water contract at \$12,000; has completed previously awarded \$42,000 contract.

Okla., Enid.—City will construct 1000 feet of eight-inch vitrified pipe lateral sewer in Marshall-Gannon first addition and in Jonesville Addition, being extension to sewer district No. 35; bids opened July 20; E. R. Lee, City Clerk.

S. C., Sumter.—City Engineer Lee will prepare specifications for constructing main line of sewerage for western half of system, and for repairing Oakland Ave. line.

Tex., Bryan.—City is considering proposition to establish sewer, water and electric-light plant; cost \$100,000. Address The Mayor.

Tex., Portland.—Charles P. Taft of Cincinnati, O., and associates are reported as planning construction of sewerage system, with John G. Willacy of Corpus Christi, Tex., in charge of work. (See "Miscellaneous Enterprises.")

Va., Clifton Forge.—City Council is considering issuance of \$65,000 of bonds for construction of sewers, paving streets and sidewalks, building bridges, erecting jail, etc. Address The Mayor.

TELEPHONE SYSTEMS

Ark., Helena.—Lake View Telephone Co. (Incorporated recently) has elected S. Staub, president; W. H. Howe, vice-president; Wm. Richardson, treasurer; construct 26 miles of line, connecting Helena, Wabash and Oneida, Ark.; supplies purchased.

Fla., Ocala.—Marion County Telephone Co. incorporated with \$10,000 capital stock; W. N. Camp, president, of Ocala; J. R. Williams, vice-president, of Citra, Fla.; Edward Holder, treasurer, of Ocala; operate telephone line from Citra, Fla., to Ocala, Lake Weir and Leesburg.

Mo., Lathrop.—Clover Leaf Telephone Co. will lay underground cables in business section for telephones.

N. C., Siler City.—Bonlee Telephone Co. (recently reported incorporated with \$10,000 capital stock) will construct 150 miles of line connecting Siler City, Pittsboro, Bonlee and Goldston, N. C.; erect two exchanges; Henry Pilse, engineer in charge of construction; C. N. Bracy, president; W. D. Siler, vice-president; J. W. Siler, secretary-manager.

Tenn., Livingston.—Home Telephone Co. Incorporated by John Lacy, J. L. Parrish, S. O. Huddleston and others; construct telephone line between Livingston and Byrdstown, Tenn.

Tenn., Byrdstown.—Home Telephone Co. Incorporated with \$15,000 capital stock by John Lacy, K. L. Harris, S. O. Huddleston and others.

Va., Buffalo Ridge.—Buffalo Ridge Telephone Co. Incorporated with \$5000 capital stock; G. A. De Hart, president, Buffalo Ridge; J. A. Nolen, Jr., secretary, Elmsville, Va.

TEXTILE MILLS

Ga., Monticello—Cotton Goods.—D. N. Harvey is understood to be interested in plan for organizing company to build cotton mill.

N. C., Raleigh—Carpets, etc.—J. A. Mathews, 242 Tucker St., is reported as to establish carpet and rug mill.

N. C., Salisbury—Ginghams, etc.—Salisbury Cotton Mills will build one-story 74x30-foot brick addition to weaving department and install 80 looms; now has 21,500 ring spindles, 500 looms, etc.

N. C., Vass—Cotton Yarns.—Vass Cotton Mills Co. will install 5000 spindles and operate by electricity; machinery contracts awarded through engineer, Stuart W. Cramer, Charlotte, N. C.; authorized capital stock, \$200,000; Angus Cameron, president. (Lately mentioned.)

S. C., Gray Court—Cotton Goods.—R. L. Gray is interested in plan for erecting cotton mill.

S. C., Darlington—Cotton Goods.—D. T. McKeithan, L. E. Williamson, C. B. Edwards and S. Vaughn propose organizing \$300,000 company to build cotton mill.

S. C., Union—Cotton Waste.—L. L. Wagoner, care Union Grocery Co., Main and Bachelor Sts., may establish cotton-waste mill. (See "Miscellaneous Factories" and "Machinery Wanted.")

W. Va., Parkersburg—Woolen Goods.—American Woolen Mills Co. incorporated with \$5000 capital stock by M. R. Hansel, Charles L. Streible and others.

WATER-WORKS

Ala., Alexander City.—City postponed date of election (recently reported) to August 17 for voting on issuance of \$2500 for extending water-works system. Address The Mayor.

Ala., Opelika.—City has voted issuance of \$85,000 bonds for construction of water-works and electric-light plant. Address The Mayor. (Lately mentioned.)

Ark., Hamburg.—Hamburg Improvement District Board Commissioners will install water-works and electric-light plant.

Fla., White Springs.—City voted negatively on previously noted bond issue of \$20,000 for water-works and sewerage; contemplates holding another election later to vote on \$45,000 bond issue for water-works, sewerage, lighting plant, street improvements and school building; of this amount, about \$5000 for street improvements, and same for new school building; G. S. Mobley, Mayor.

Ga., Dalton.—H. S. Jaudon Engineering Co., Savannah, Ga., has completed plans and specifications for water-works and electric-light plants; water-works system will include 4,500,000 gallons daily; equipment will include steam pump and electric pump for lifting water from Mill Creek, on which pumping station, filter tanks, etc., will be located, into settling basin; two steam and one electric pumps will pump water, after it has been filtered, into reinforced-concrete reservoir on top of Mt. Rachel; reservoir capacity 750,000 gallons; filter tank at present plant will be used and another of reinforced concrete will be built; 12-inch water main will lead from reservoir on Mt. Rachel, which will join Hamilton St. main at Waugh St.; another main will be laid on street parallel with Hamilton St., and two mains will be joined at intervals; electric-light plant will be installed in same building with water-works plant; electrical equipment will include compound-condensing engines direct connected to generators; capacity 500 horse-power. (Recently mentioned.)

Ga., Rockmart.—City will vote August 10 on issuance of \$25,000 of bonds for construction of water-works; I. F. Mundy, Mayor.

Ga., Meigs.—City will vote on issuance of \$20,000 bonds for water-works. Address The Mayor.

Md., Cumberland.—City Council appropriated \$5000 for engineer's service, examinations and plans for gravity water supply from Evitts Creek, with Bottle Run as an adjunct; Legislature authorized \$500,000 bond issue to be approved by voters. Address The Mayor.

Md., Elkton.—City defeated \$75,000 bond issue for constructing water, light and sewer systems. Address The Mayor. (Recently mentioned.)

Md., Hancock.—City will award contracts for construction of water-works in sections;

bids lately received for plant as whole exceeded \$30,000 bond issue; system will include 300,000-gallon concrete reservoir, pumping station, filtration plant, two miles water pipe and sewer; plans by Penniman & Fairley, 411 Marine Bank Bldg., Baltimore, Md.; R. J. McCandlish, Clerk. (Recently mentioned.)

Md., Williamsport.—Edward M. Byron, M. Emmett Gullen, Wm. G. Byron and others have organized company and will petition city for franchise to establish water-works system; system will include reservoir, filtration plant, etc.; estimated amount to be expended \$40,000.

Miss., Collins.—City awarded contract to Guarantee Paving Co., Collins, for erection of reservoir for water-works plant; reinforced concrete; capacity 200,000 gallons. (Recently mentioned.)

Mo., Dexter.—City will probably vote in August on \$40,000 or \$50,000 bond issue for construction of water-works and sewer systems recently noted; Fuller-Coutt Company Chemical Bldg., St. Louis, Mo., engineers. (See "Sewer Construction.")

Mo., Joplin.—L. P. Cunningham is interested in construction of proposed 30-inch pipe line to pipe spring water from Joplin to Kansas City, Mo., at estimated cost of \$4,000,000; is also reported as contemplating construction of pipe line from Center Creek and Spring River springs to cities in Joplin district.

Mo., Montgomery City.—City will vote July 25 on \$11,000 bond issue for extension to water-works system recently noted; Fuller-Coutt Company, Chemical Bldg., St. Louis, Mo., engineers.

N. C., Asheville.—M. H. Kelly, Asheville, has contract at \$12,000 for sewer and water construction.

N. C., Murphy.—M. H. Kelly, Asheville, N. C., reports receiving sewer and water contract at \$12,000; previously awarded \$42,000 contract completed.

Okla., Bridgeport.—City has engaged Oklahoma Engineering Co., 129 West Broadway, Anadarko, Okla., to prepare plans for proposed water-works system; will receive bids in August. (See "Machinery Wanted.")

Okla., Durant.—City is considering plans and bids for construction of filtration plant at water-works. Address The Mayor.

Okla., Foss.—City has plans for construction of water-works system to cost \$25,000; W. H. Kennedy, superintendent of construction.

Okla., Hastings.—City will vote on issuance of bonds for water-works system. Address The Mayor.

S. C., Charleston.—Mayor R. H. Rhett appointed special committee to select engineers to estimate cost of constructing water-works.

S. C., Ellmore.—City will vote July 25 on issuance of \$500 bonds for water-works. Address The Mayor.

Tenn., Decherd.—City has awarded contract for water-works and electric-light system. Address The Mayor.

Tenn., Bryan.—City is considering proposition to establish water, sewerage and electric-light plant; cost \$100,000. Address The Mayor.

Tenn., Cnoro.—City will install electric pumping plant at water-works; pumps, motors and air compressors to be in duplicate; will construct concrete-block house 20x40 feet; contract for machinery awarded. Address The Mayor.

Tenn., Gordon.—Gordon Water, Light & Ice Co., W. S. Dawson, secretary, Box 22 (recently noted incorporated with \$5000 capital stock), will install small water plant; water to be forced about 100 feet elevation to storage tank and supplied to consumers by gravity pressure; water from lake; equipment includes 18-foot windmill-gasoline engine, five-inch syphon pump, 16x20x23-inch cypress tank, etc.; capacity, 50,000 to 75,000 gallons per 24 hours.

Tenn., LaPryor.—LaPryor Water & Light Co., incorporated with \$8000 capital stock by W. G. Bates, D. A. Harrison and R. L. Conser.

Tenn., Portland.—Charles P. R. Taft of Cincinnati, O., and associates are reported as planning drilling two artesian wells and constructing water-works, with John G. Willacy of Corpus Christi, Tex., in charge of work. (See "Miscellaneous Enterprises.")

Va., Lynchburg.—Virginia State Epileptic Colony, Dr. A. S. Priddy, executive officer (recently noted to construct system to pipe water from Lynchburg, across river, to colony, 5000 feet), will expend \$4000 in pipe line, \$2500 for tower, tank and engine; will install turbine centrifugal pump, connected with six-horse-power electric motors; 25,000-gallon cypress tank on 60-foot steel tower; will open bids on construction work July 25; machinery bids to be announced later; C. L.

DeMotte, Lynchburg, engineer. (See "Machinery Wanted.")

W. Va., Romney.—City contemplates securing more adequate water supply. Address The Mayor.

WOODWORKING PLANTS

Ala., Anniston.—Tables, etc.—Lehman Manufacturing Co. will install additional machinery for manufacture of kitchen tables and safes.

Ky., Owensboro.—Cabinets, etc.—Barnes-Kelly Manufacturing Co. and Owensboro Seating & Cabinet Co. have consolidated and incorporated as Ohio Valley Manufacturing Co.; E. M. Barnes, W. A. Steele, S. R. Ewing and others, incorporators.

Ky., Louisville.—Staves and Cooperage.—Chess & Wymond Company increased capital stock from \$200,000 to \$1,000,000.

La., New Orleans.—Sashes, etc.—Berling Sash, Door & Blind Co., incorporated with \$10,000 capital stock; Fred Huerkamp, president; George Huerkamp, secretary-treasurer; Henry Huerkamp, Jr., vice-president.

Miss., Jacobs.—Staves.—Columbia Stave Co., incorporated with \$10,000 capital stock by John Buettner, Jacob Herling, Robert Brankstone and others, Memphis, Tenn., and E. C. French, Shaw, Miss.

Tenn., Houston.—Handles.—Texas Handle Co. will erect plant on Waverly St.; brick and wood; factory building, 100x24x24 feet; office, 16x14 feet; stable, 40x18 feet; estimated cost \$2500.

W. Va., Bluefield.—Rug Racks.—G. S. Catzen of Home Furniture Co. will establish plant for manufacturing patented rug rack.

BURNED

Ark., Walcott.—Bank of Walcott; Walcott Mercantile Co.'s building, owned by Dacus & Pillows; loss \$12,000.

Fla., Plant City.—Plant City Courier's plant and offices; building owned by W. B. Herling; total loss \$5000.

Ga., Clyde.—Bryan county jail. Address County Commissioners.

La., Jena.—G. G. Russell's residence, barn and stables; W. P. Myers' building; total loss \$7500.

La., Slaughter.—Slaughter Gin Co.'s plant; loss \$12,000.

Mo., Kansas City.—American Reduction & Fertilizer Co. at 19th and Wyoming Sts.; loss \$10,000.

N. C., Aberdeen.—Aberdeen Sash & Blind Co.'s factory; loss \$50,000.

Okla., Enid.—Hotel owned by Polk Casner and occupied by Henry Block; loss \$3500.

Okla., Enid.—City Hotel; loss \$25,000.

S. C., Columbia.—Grimes Cowper's barn; estimated loss \$5000.

S. C., Laurens.—J. L. Hopkins' store; loss on building, owned by C. E. and H. S. Kennedy, \$3000.

Tenn., Bristol.—Hamilton-Bacon-Hamilton Company's warehouse.

Tenn., Franklin.—Pryor, Lillie & Co.'s grain elevator; loss \$25,000.

Tenn., Amarillo.—Amarillo Ice & Cold Storage Co.'s plant; loss \$100,000.

Tenn., Fort Worth.—C. T. Burns' residence; loss \$4000.

Tenn., Sherman.—Buildings at Grayson County Poor Farm; loss \$4000. Address County Commissioners.

Va., Lynch Station.—J. W. Frazier's store and dwelling; E. Taylor's postoffice; J. J. Anthony & Bro.'s store; Webb & Frazier's store and Warehouse; R. D. Smith's telephone exchange and hotel; total loss \$50,000.

Va., Wise.—J. C. Richardson's residence; A. M. Vickers' buildings; Judge Bond's building; loss \$16,000.

W. Va., Piedmont.—Crystal Candy Kitchen, Horace P. Whitworth, president.

BUILDING NEWS

BUILDINGS PROPOSED

APARTMENT-HOUSES

Fla., Jacksonville.—I. Cox will erect apartment-house; brick and stone; three or four stories.

Fla., Jacksonville.—John S. Flanagan, San Antonio, Fla., will erect apartment and store building; five stories; lower floor stores; upper floors apartments.

Fla., Jacksonville.—Dr. J. C. Bishop, Alachua, Fla., has plans by Fred A. Bishop, 302 Candler Bldg., Atlanta, Ga., for apartment

house; 12 apartments, 7 rooms each; three stories; 70x125 feet; brick veneer; tar and gravel roof; gas and electric lighting; cost \$18,000; date of opening bids not set.

ASSOCIATION AND FRATERNAL

Fla., Jacksonville.—Odd Fellows' Building Corporation chartered with \$150,000 capital stock; Marcus Conant, president; John H. Ek, vice-president; J. C. Connelly, secretary-treasurer; plans erection of lodge and office building.

S. C., Columbia.—C. P. Younts, general secretary, advises that E. M. Dupre, chairman, or D. W. Robinson, secretary building committee, should be addressed for information relative to proposed \$100,000 Young Men's Christian Association building. (Recently noted.)

S. C., Sumter.—Young Men's Christian Association will erect building.

Tenn., Nashville.—Grand Lodge State of Tennessee, Ancient Free and Accepted Masons, will expend \$20,000 for erection of addition to building at 306 Seventh Ave., to be used as auditorium.

Tenn., Mexia.—American Women's League, St. Louis, Mo., will expend \$3000 to erect chapter-house; 38x42 feet; stucco; plans, specifications, contracts, etc., are all furnished from headquarters; contract will not be let for some time.

W. Va., Thurmond.—H. M. Personnet received bids until July 20 for erection of Masonic Temple.

W. Va., Thurmond.—Sewell Chapter No. 24, Masons, having plans prepared by H. Russ Warner, Charleston, W. Va., for 42x90-foot lodge building; date of opening bids not set. Address H. M. Personnet. (See "Machinery Wanted.")

BANK AND OFFICE BUILDINGS

D. C., Washington.—S. W. Woodward of Woodward & Lothrop, 10th, 11th, F and G Sts., N. W., is reported as planning erection of office building at 15th and H Sts., N. W.

Fla., Jacksonville.—Odd Fellows' Building Corporation, Marcus Conant, president, will erect office and lodge building. (See "Association and Fraternal.")

Ky., Lone Oak, R. F. D. from Paducah.—Bank of Lone Oak, E. Futrell, president, will erect two-story bank building; 40x50 feet.

La., New Orleans.—Teutonia Bank & Trust Co. will remodel present structure and erect addition; solid bronze doors in vestibule in front; polished plate-glass doors in rear; vault concrete, interlaced with steel bars and lined throughout with heavy plates of steel and equipped with time lock and automatic steel gate inside; tiled floor; St. Charles St. and Union St. entrances faced with white marble; steam heat.

La., Opelousas.—Union Bank & Trust Co. will expend \$10,000 to erect bank building recently noted; 40x70 feet; brick and stone; hot-water heat; electric lighting; architects invited to submit sketches of one and two-story bank buildings; successful architect to receive appointment.

Md., Baltimore.—Following contractors will submit bids on erection of office building for U. S. Fidelity & Guaranty Co.; Benjamin F. Bennett Building Co., 123 South Howard St.; Engineering-Contracting Co., 302 St. Paul St.; Neel Construction Co., U. S. Fidelity & Guaranty Co. Bldg., Calvert and German Sts.; J. Henry Miller, 106-108 Dover St., all of Baltimore; plans by Otto G. Simonson, 1210-1211 American Bldg., Baltimore; bids will be opened July 25. (Further facts recently mentioned.)

Md., Hampstead.—First National Bank purchased site corner Main and Shiloh Sts. and will erect bank building; brick and Indiana limestone; two stories and basement; plans have been prepared.

Mo., St. Louis.—S. D. Rossi has plans by Gustav P. Wuest, St. Louis, for erection of office building northeast corner Delmar Blvd. and Kingshighway; five stories; 165x110 feet; fireproof; 112 offices and 14 stores; equipped with compressed air, gas and electric lights; floors of corridors of pink Tennessee marble; Carrara white marble wainscoting, with black marble base and capping; two elevators; vacuum heating and cleaning system; estimated cost \$200,000.

N. C., Charlotte.—Commercial National Bank will remodel building for bank.

Okla., Oklahoma City.—Southwest Mortgage Co. reported to erect 16-story fireproof office building; architects, Layton, Smith & Hawk, Oklahoma City; site at northeast corner Main and Harvey Sts. leased from James M. Weaver of Cincinnati, O. (Mr. Weaver recently incorrectly noted to erect building.)

Okla., Pawhuska.—Pawhuska National Bank will erect four-story bank building.

S. C., Ellmore.—Ulmer-Irick Company has plans by E. J. & W. K. Dunne, Sumter, S. C., for bank and office building recently noted; two stories; 48x120 feet; brick and concrete; cost \$10,000; day's work. (See "Machinery Wanted.")

Tenn., El Paso.—Galveston, Harrisburg & San Antonio Railway, A. V. Kellogg, engineer maintenance of way, Houston, Tex., has plans for erection of office building; three stories; reinforced concrete; mission style architecture.

Va., Montvale.—Burdorf County Bank will award contract July 29 for small brick and cement bank building; single story; 18x11 feet; plans by Overstreet and Wingfield.

CHURCHES

Ark., Little Rock.—Union African M. E. Church, Rev. Francis E. Ashford, pastor, is having plans prepared by J. S. McClellan for erection of church and Sunday-school corner Pulaski St. and Wright Ave.; 44x100 feet; pressed brick; main auditorium, seating capacity 450; Sunday-school room in basement to have seating capacity of 200.

Ark., Van Buren.—First Methodist congregation will erect \$20,000 edifice. Address The Pastor, First Methodist Church.

Fla., Tampa.—Palm Avenue Baptist congregation is preparing to begin erection of proposed edifice; pressed brick; terra-cotta trimmings; three towers; estimated cost, \$35,000. Address The Pastor, Palm Avenue Baptist Church.

Ga., Brunswick.—St. Mark's Episcopal Church has plans by Wallin & Young, Savannah, Ga., for erection of church; veneer pressed brick; stone trimmings; Gothic style architecture; approximate cost, \$20,000.

Ky., Midway.—Presbyterian Church will enlarge and remodel edifice; bids will be opened July 26; drawings and specifications on file at Citizens' Bank, Midway, and office of H. Walters, Board of Trade Bldg., Louisville, Ky.

La., Algiers.—Trinity Lutheran congregation will erect church edifice; cost \$7000. Address The Pastor, Trinity Lutheran congregation.

La., Algiers.—Trinity Lutheran Church, Rev. Frederick Wambuzans, pastor, will erect edifice to cost about \$7000.

Mo., Joplin.—Methodist Church at Royal Heights will erect edifice; concrete blocks; cost \$6000; Rev. T. B. Lawrence is pastor.

Md., Kensington.—Roman Catholic Church will erect edifice; 40x80 feet; seating capacity 200. Address Rev. Charles O. Rosensteel, pastor St. John's Catholic Church, Forest Glen, Md.

N. C., Asheville.—Trinity Episcopal congregation has asked for bids for erection of edifice; frame; seating capacity about 200; cost \$2000 to \$4000; stone foundation completed. Address The Pastor, Trinity Episcopal Church.

N. C., Monroe.—St. Paul's Episcopal congregation contemplates erecting edifice to cost \$6000. Address The Pastor, St. Paul's Episcopal Church.

N. C., Morven.—Methodist Church, J. M. Little, chairman building committee, will open bids August 1 for erection of edifice recently noted; seating capacity 500; hot-air heat; electric lighting; cost \$15,000; plans by Louis H. Ashbury, Charlotte.

Tenn., Dallas.—Mount Rose Negro Baptist congregation will erect edifice; frame; 50x90 feet; cost \$8000. Address The Pastor, Mount Rose Negro Baptist Church.

Va., Norfolk.—Owens Memorial Methodist Episcopal congregation will erect edifice. Address The Pastor, Owens Memorial Methodist Episcopal Church.

CITY AND COUNTY

Ala., Birmingham.—Stockade, Fire Stations, etc.—City contemplates erection of stockade for female prisoners on Red Mountain; also proposes erection of two fire stations. Address The Mayor.

Ark., Little Rock.—Fire Station.—Board of Public Affairs will receive bids until July 25 for erection of fire station in Jones & Worthen's Addition; plans and specifications at office of chief of Fire Department; separate bids for taking frame building on property for part payment and erection of building with ground cleared; also for sale of frame building, to be removed at once by purchaser; F. M. Oliver, clerk of board.

Ga., Macon.—Fair Building.—Finance committee appropriated \$3000 for erection of additional building at Central City Park for exhibitions at State Fair.

La., Lake Charles.—City Hall.—City has voted issuance of \$360,000 bonds for erection of city hall and for sewers, streets, etc. Address The Mayor. (Lately mentioned.)

La., New Orleans.—Engine-house.—City has plans by E. A. Cristy, New Orleans, for proposed engine-house at Carrollton Ave. and Moss St.; two stories; brick and stucco; cost \$12,000.

Tenn., Knoxville.—Exposition Building.—A. B. Collier, chairman; Wm. Knabe, secretary, and others, committee representing Knox county, will receive bids until July 25 at office of R. F. Graf & Son, architects, Knoxville Bank and Trust Bldg., Knoxville, for erection of County Fair building on Appalachian Exposition grounds, Chilhowee Park; 50x90 feet; one story; 32 feet high; 10-foot balcony entirely surrounding interior; Grecian style; cost \$5000; plans and specifications at office of architect as above; James G. Johnson, County Attorney.

Tenn., Nashville.—Hospital.—Davidson County Asylum Commissioners, at office of John F. Gaffney, chairman, 329½ Fourth Ave. North, will receive bids until July 25 for erection of annex; recent bids rejected; bids to be on departments separately; certified check for 5 per cent. amount of bid; plans and specifications at office of Asmus & Norton, architects, 72-74 Cole Bldg., Nashville. (Recently noted.)

Tex., Austin.—Fire Station.—City Clerk received bids until July 20 for erection of fire hall for Tenth Ward Fire Company; two stories; 50x100 feet; red pressed brick; limestone trimmings; fire escape; cost \$7500; certified check for 10 per cent. amount of bid; plans and specifications at office of C. H. Page & Bro., architects, Austin. (Recently mentioned.)

Tex., McKinney.—City Hall and Jail.—Bids will be received until July 28 for erection of combined city hall and fire station; certified check for \$500; plans and specifications at office of Flanders & Flanders, architects, Dallas, or of R. F. Dowell, City Secretary.

Va., Clifton Forge.—Jail.—City Council is considering voting on issuance of \$65,000 bonds for construction of jail. Address The Mayor. (See "Road and Street," "Sewers" and "Bridges.")

Va., Norfolk.—Police Headquarters.—Public Improvement Co. has tentative plans by John Kevan Peebles, Norfolk, for proposed police headquarters building at Cove and Aven Sts.; three stories; granite and brick; frontage 88 feet; morgue adjoining; electric elevator; heating plant in basement; water-proofing system; cost \$45,000.

Va., Richmond.—Fire Department.—City will expend \$14,000 for improvements to fire department. Address The Mayor.

COURTHOUSES

Ark., Rison.—Cleveland county is having plans prepared by Theo. M. Sanders, Little Rock, Ark., for courthouse; pressed brick and stone; tile floors and roof; steam heat; cost \$50,000.

Mo., Springfield.—Green county will erect courthouse; reinforced concrete; fireproof; burglar-proof vaults; exterior finished in Phoenix stone; interior in marble; 192x98 feet; three stories; cost \$25,000; T. K. Bowman, superintendent. (Previously mentioned.)

Okla., Nowata.—Nowata county voted \$75,000 bond issue to erect courthouse. Address County Commissioners.

Tex., Port Lavaca.—Calhoun County Commissioners' Court will receive competitive plans and specifications for courthouse until July 27; cost not to exceed \$40,000; bids for price of plans separate from costs of architects' services; Willet Wilson, County Judge; W. C. Best, County Clerk. (Recently mentioned.)

DWELLINGS

Ala., Birmingham.—W. L. Sessions will erect dwelling; two stories; cost \$4000.

Ala., Birmingham.—W. M. Franklin will erect two dwellings on Thirteenth Ave. near 21st St.; two stories; cost \$3300 each.

Ala., Birmingham.—Crawford Johnson, address, care of Coca-Cola Bottling Works, will open bids July 20 for erection of dwelling recently noted; brick veneer; concrete foundation; hot-water heat; electric lighting; estimated cost, \$20,000; plans by Warren & Welton, 1607 Empire Bldg., Birmingham.

D. C., Washington.—John M. Henderson, 1418 F St. N. W., will erect seven dwellings on R St. and Florida Ave.

D. C., Washington.—Ralph Galt, Indiana Ave. and 1st St. N. W., will erect residence in Saul's addition; three stories; 12 rooms;

three baths and reception hall; garage in rear; cost \$25,000.

D. C., Washington.—Phillip A. Rosendorf, 1919 Ensor St., Baltimore, Md., will erect residence in Northwest Park.

Ga., Augusta.—Frank Caple of Augusta Railway & Electric Co. is having plans prepared for erection of residence.

Fla., Greenville.—C. L. Leggett has plans by Fred Bishop, 322 Candler Bldg., Atlanta, for proposed dwelling; one and a half stories; 40x70 feet; nine rooms; cost \$3500; day's work.

Fla., Jacksonville.—S. G. Wilkinson will erect two-story frame dwelling; cost \$3000.

Fla., Jacksonville.—W. R. Rart will erect residence; two stories; frame; brick veneered; cost \$7000.

Ga., Augusta.—Thomas Barrett, Jr., will erect two-story double brick tenement house; cost \$6000.

Ga., Atlanta.—E. Reid has plans by Lella Ross Wilburn, 305 Peters Bldg., Atlanta, for proposed dwelling; seven rooms; one story; 30x30 feet; frame; tile roof; tile floor; hot-air heat; gas and electric lighting; cost \$4500; day's work.

Ga., Decatur.—W. A. Ozmer has plans by Lella Ross Wilburn, 305 Peters Bldg., Atlanta, for proposed dwelling; two stories; 45x59 feet; frame; slate roof; tile floor for porch; hot-air heat; gas and electric lighting; cost \$5000; construction by owner.

La., New Orleans.—Hirsch-Levy Real Estate Co. will erect \$5000 building.

La., New Orleans.—Mrs. S. Gonzales will erect residence; cost \$6500.

La., New Orleans.—Mrs. John Blank will erect double two-story residence; cost \$4500.

La., New Orleans.—Frank Fox will erect residence; two stories; cost \$3250.

Md., Baltimore.—M. N. Mayhew has awarded contract to J. H. Miller, 106 Dover St., Baltimore, for erection of dwelling at Ten Hills; two and one-half stories; frame; plans by Owens & Sisco, 1095 Continental Bldg., Baltimore.

Md., Baltimore.—W. T. Schindler, Tenth and Elgin Aves., will expend \$4500 to erect dwelling recently noted; 28x31 feet; frame; steam heat; gas and electric lighting; hard wood floors; tile bath; plans by Henry J. Tinley, 314 North Charles St., Baltimore.

Md., Baltimore.—Jacob Cohen will receive bids until July 29 for erection of store and dwelling at Park Heights and Belvedere Aves.; contractors estimating are J. S. Moke, Hoffman Bldg.; R. B. Mason, 15 East Fayette St., both of Baltimore; plans by Jacob F. Gerwig, 210 East Lexington St., Baltimore. (Previously noted.)

Md., Baltimore.—Charles Stoner, 1927 West Lombard St., will erect six dwellings on Brice St.; two stories; 13x45 feet; cost \$8000.

Md., Baltimore.—Teofil J. Skalski, 529 South Bond St., will erect two stores and dwellings at 1517-19 Eastern Ave.; three stories; brick; 13x51 and 17x51 feet; cost \$3200.

Md., Baltimore.—L. N. H. D. Cox, Rogers and Park Heights Aves., will erect residence at Plimco Rd. and Rogers Ave.; two and a half stories.

Md., Baltimore.—Frank Novak, 2800 East Jefferson St., has plans by J. F. Hirt, 2809 Jefferson St., for five dwellings on Orleans St.; two stories; brick; four 13x44 feet; one 13x50 feet; cost \$6000.

Md., Baltimore.—John T. Donohue, 1808 Thames St., has plans by M. R. Stone, 2238 East Hoffman St., Baltimore, for 31 two-story brick dwellings; 16 on Potomac St., 15 of which will be 13x45 feet, 1 15x48 feet; 18 on Hare St., 16 of which will be 12x41 feet, the other two 12x44 feet; cost \$35,000.

Md., Roland Park.—J. Ross Myers, 500 Hawthorn Rd., has plans by Howard Hill, 11 East Pleasant St., Baltimore, for residence at University Parkway and Overhill Rd.; two stories and attic; 38x45 feet; porch 18x37 feet; brick construction; hot-water heat.

Md., Roland Park.—William G. Nolting of Wyatt & Nolting, Keyser Bldg., Baltimore, Md., prepared plans for and will erect residence on Midland Rd.; brick; colonial style; porch at one end; portico at front; cost \$20,000; contractors estimating are John Cowan, 106 West Madison St.; Gladfelter & Chambers, 2672 Woodberry Ave.; W. E. Harn & Co., 2700 Huntington Ave.; A. F. West, 217 South Gilmer St.; M. C. Davis, 5 Hopkins Pl.; all of Baltimore, Md.; Roland Park Co. of Roland Park.

Tenn., Chattanooga.—S. D. Reynolds will receive bids at once for erection of dwelling recently noted; nine rooms; two stories; cement floors to basement; brick and stucco; shingle roof; hard pine interior finish; hot-air heating plant; gas and electric lighting;

cost \$5000; plans by Huntington & Sears, James Bldg., Chattanooga.

Tenn., Nashville.—Mrs. Hildebrand will erect \$2000 brick-veneered residence.

Tenn., Nashville.—E. F. Terry will erect stone-veneered residence; cost \$3000.

Tenn., Nashville.—L. B. Flite will erect residence; two stories; brick veneered and stucco; cost \$4100.

Tenn., Nashville.—W. W. Banks will erect residence at 703 Gay St.; cost \$3000.

Tenn., Nashville.—A. M. Hagan has plans by C. K. Colley, Nashville, for two-story brick residence.

Tenn., Selmer.—F. Wilson will erect residence.

Tenn., Selmer.—William Browder will erect residence.

Tenn., Selmer.—S. E. Peoples will erect cottage.

Tex., Cuero.—W. M. Ratcliffe will erect residence.

Tex., Dallas.—J. E. Lee, Box 234, will open bids about August 1 for erection of residence recently mentioned; 47x39 feet, with porches and terraces; two stories and basement; hot-water heat; plans by C. D. Hill & Co., Dallas; cost \$10,000 to \$12,500. (See "Machinery Wanted.")

Tex., Houston.—A. L. Metcalf will expend \$8000 to erect dwelling recently noted; 54x46 feet; wood, rough plaster exterior; tile roof; gas grates; gas and electric lighting; plans and construction by owner.

Va., Capron.—Vincent & Drewry will erect dwellings in connection with development of 3000 acres of land. (See "Land Developments.")

Va., Bristol.—J. A. Stone will not at present erect dwelling recently noted.

Va., Richmond.—H. J. Myers will erect dwelling at 224 Park Ave.; two stories; brick; cost \$5000.

Va., Staunton.—Virgil P. Randolph of New York purchased Estonsville tract for \$60,000 and is having plans prepared by Noland & Baskerville of Richmond, Va., for \$100,000 home; will install electric-light plant and telephone system; contract for electrical work awarded to Shenandoah Electric Co. of Staunton.

GOVERNMENT AND STATE

D. C., Washington.—Jail.—James Knox Taylor, Supervising Architect, Treasury Department, is preparing plans for remodeling U. S. jail; will install 250 lavatory equipments; cost \$20,000; remodel kitchen; install electric lights; improve heating facilities; about \$35,000 will be expended for interior improvements; exterior improvements will consist of replacing slate roof and erecting nine-foot fence around building, etc.

D. C., Washington.—Postoffice.—Treasury Department, James Knox Taylor, supervising architect, approved plans by D. H. Burnham & Co., Chicago, Ill., for proposed postoffice building to cost \$3,000,000; will have 70,000 feet floor area; main floor on level with Union Station and connected with same by bridge; plan to erect separate six-story building to contain power and heating plant, mail-bag repair shop, mail lock shop, motor repair shop, postal supplies, dead-letter office, etc. Due announcement will be made of call for proposals.

Fla., Jacksonville.—State Hospital.—State Board of Health has accepted plans by Robinson & Reedy, Jacksonville, and will soon invite bids for erection of laboratory and general offices; two stories; reinforced concrete with brick face; main building 50x80 feet; central portion extending in front and rear, making two large wings.

Md., Baltimore.—Immigration Depot.—James Knox Taylor, supervising architect, Treasury Department, Washington, D. C., has asked Bureau of Immigration for suggestions preparatory to preparing plans for proposed immigrant station; \$30,000 is available for purchase of site and \$100,000 for erection of building.

S. C., Columbia.—Hospital.—State Hospital for Insane, Dr. J. W. Babcock, superintendent, is having plans prepared for completion of Taylor building and erection of three additional brick structures; construction to begin August 1; about \$150,000 will be expended.

Va., Fort Howard.—Barracks, etc.—R. H. Richardson & Son, Hampton, Va., have contract at \$38,000 for construction of barracks, guard and store house.

HOTELS

Ala., Birmingham.—Fifth Avenue Hotel Co. is being organized by Brown Bros. & Co., Frank Nelson, Jr., W. P. G. Harding and

Steiner Bros. to erect hotel on Fifth Ave.; 12 to 14 stories; 300 rooms; fireproof; site 100x140 feet; plans by New York architect; cost, including site, \$900,000; furnishings estimated to cost \$150,000.

Ala., Birmingham.—Brown Bros. & Co., Frank Nelson, Jr., W. P. G. Harding and Steiner Bros. are organizing company to erect hotel; 12 stories; fireproof; site 100x140 feet; estimated expenditure, \$1,000,000; plans by New York architects.

Ark., Argenta.—Lasker Bros., Little Rock, Ark., has plans by H. J. Harker, Little Rock, for erection of hotel at Washington Ave. and Maple St.; cost \$35,000.

Ark., Ashdown.—J. M. Johnson will expend \$25,000 to \$40,000 on hotel recently noted; three stories and basement; 86x96 feet; brick; electric lighting; bids opened July 25; plans by Seibert & Witt, Texarkana, Ark. (Recently incorrectly located at Texarkana.)

Ark., Ravenden Springs.—Ravenden Springs Hotel Co. incorporated with \$100,000 capital stock by H. B. Bull, P. C. Hawkins and Isaac Ebbert.

Fla., Jacksonville.—John J. Ahern will remodel St. James Hotel and probably erect additional story.

Fla., Jacksonville.—O. J. Olmstead will erect eight-story hotel with three-story annex; brick and stone; plans by Gould C. Butler, Jacksonville.

Ky., Georgetown.—Lancaster Hotel will erect two additional stories over entire hotel, including wing now in course of construction, giving capacity of 100 rooms.

N. C., Charlotte.—R. M. Miller will expend \$50,000 for improvements to Buford Hotel; reported to install telephones and elevators, probably erect wing, etc.

Okla., Tulsa.—Tulsa Building Co. will have plans ready by August 15 for 10-story hotel building recently noted; 140x150 feet; fireproof construction; 300 rooms with bath, 200 without; cost \$250,000 to \$400,000; F. W. Hunt, Springfield, Mo., architect, may be addressed.

Tenn., Columbia.—T. E. Gordon and J. A. Titcom of Beaver Dam Company are arranging to rebuild Beaver Dam Hotel at Beaver Dam Springs; to accommodate 75 to 100; install hydraulic rams and complete water-works system.

Tex., Dallas.—Adolphus Busch, St. Louis, Mo., has plans by Barnett, Haynes & Barnett, Frisco Bldg., St. Louis, for hotel; 20 stories; Louis XIV style; casement windows, with ornamental iron guard balconies; red velvet brick, trimmed with Bedford stone; entrance covered by wrought metal canopies constructed of bronze and glass; French roof; roof garden; Circassian walnut and gold lobby extending through two stories to glass-domed roof, with balconies from second story; elevators; marble plunge in basement designed in Pompeian style; cost \$1,000,000; Edward A. Faust of St. Louis and committee in charge of construction. (Previously noted.)

Tex., El Paso.—Charles and A. C. De Groff will rebuild and refurnish lobby and basement of Sheldon Hotel; cost \$50,000 to \$100,000.

Tex., El Paso.—W. C. Davis and Z. T. White and others are interested in proposed erection of hotel at Overland and Oregon Sts.; 200x100 feet; ten stories; estimated cost, \$500,000; ground floor under hotel to contain 14 offices and stores.

Tex., Portland.—Charles P. Taft of Cincinnati, O., and associates are reported as planning erection of hotel, pavilions and bathhouses, with John G. Willacy of Corpus Christi, Tex., in charge of work. (See "Miscellaneous Enterprises.")

Tex., St. Paul (not a postoffice).—International Land & Investment Co. of Omaha, Neb., has plans by Herbert S. Green, San Antonio, Tex., for hotel; 20 rooms.

Tex., Weatherford.—Joel W. Hicks will remodel building and erect addition for hotel; 25 rooms.

MISCELLANEOUS STRUCTURES

Ala., Bessemer.—Clubhouse.—Mr. Van Trump and others interested in erection of country and automobile clubhouse at West Lake, one and one-half miles from Bessemer; cost \$5000.

Ark., Helena.—Guildhouse.—St. John's Episcopal Church vestrymen have purchased site corner Perry and Pecan Sts. and will erect guildhouse; 132x132 feet; two stories; artificial stone; roof garden and gymnasium also contemplated.

Fla., Pensacola.—Grandstand, etc.—Hart Bernham of Pensacola and Mr. Stroud, St. Louis, Mo., will erect grandstand, paddock and stables at Kupfrian race track.

Fla., Tampa.—Clubhouse.—Tampa Automobile

ble Club has accepted plans by Fred J. James, Tampa, for erection of proposed clubhouse at Rocky Point; two stories and basement; concrete; cost \$10,000; building for golf equipment and gymnasium will probably be built later. (Lately mentioned.)

La., Clinton.—Auditorium.—Company has been organized with \$5000 capital stock by W. J. Sebastian, president; I. L. Heyman, vice-president; Ed Leboze, secretary; L. E. Brignac, treasurer; to erect auditorium; brick; 50x80 feet.

Md., Baltimore.—Hospital.—Pittsburg Building Co., Pittsburg, Pa., is prepared to begin erection of proposed Phipps Psychiatric Clinic building at Johns Hopkins Hospital, Monument and Wolfe Sts.; building will be 175x200 feet; five stories; brick; estimated cost, \$750,000 to \$1,000,000; plans by Grosvenor Atterbury, 20 West 43d St., New York; Dr. Henry M. Hurd is superintendent of hospital.

S. C., Yorkville.—Deaconesses of Episcopal Church have plans by Sayre & Baldwin, Anderson, S. C., for proposed orphanage; two stories; 16 rooms; steam heat; electric lighting; cost \$10,000.

Tenn., Chattanooga.—Business Block.—R. L. Davis and M. C. Bonds will erect business block; three stories; brick construction; pressed-brick front.

Tex., Cleburne.—Settlement Building.—First Baptist Church will erect settlement building; 40x60 feet; two stories and basement; cost \$10,000. Address The Pastor, First Baptist Church.

Va., Petersburg.—Fair Buildings.—Agricultural Fair Association contemplates purchase of 22 acres for fair purposes and expenditure of \$3000 for buildings, etc.

RAILWAY STATIONS

Ala., Tuscaloosa.—Alabama Great Southern Railroad, C. Dougherty, engineer maintenance of way, Cincinnati, O., will erect \$25,000 station building; size of present structure; fireproof; hot-air heat; electric lighting; plans, by company, not fully determined; bids not yet asked.

Fla., Fort Dade.—Seaboard Air Line Railway, W. L. Seddon, chief engineer, Portsmouth, Va., will, it is reported, erect depot.

Tex., Round Rock.—International & Great Northern Railroad, O. H. Crittenden, consulting engineer, Palestine, Tex., has plans, it is reported, for passenger station.

Tex., Wichita Falls.—Fort Worth & Denver City Railway, R. C. Gowdy, chief engineer, Fort Worth, Tex., and others (recently reported as having plans prepared for erection of union station) have awarded contract to Texas Construction Co., Fort Worth, Tex., for erection of structure; two stories; 230x90 feet; estimated cost, \$100,000.

Va., Norfolk.—Norfolk Terminal Railway Co., L. E. Johnson, president, Roanoke, Va., has plans completed by Reed & Stem, 7 East 42d St., New York, for union passenger station, and is now preparing to advertise for bids; site has frontage of 400 feet on Main St. and same on Archer's La.; brick and steel construction with granite base and terra-cotta trimmings; fireproof; marble, shelter shed, concourse and carriage door; trackage facilities; main station or office building will be eight stories and one mezzanine, 51x200 feet, and 123 feet high; waiting-room and annex building, 53.6x140 feet; power, baggage and express building, 35x330 feet; two fast elevators; heating by steam and forced hot air; cost of office building, \$500,000; station will be used jointly by Virginian Railway, Norfolk & Western Railway and Norfolk & Southern Railway; Raymond Du Puy, general manager of Virginian Railway, Norfolk. (Previously mentioned.)

SCHOOLS

Ala., Florida.—City has voted issuance of bonds for erection of \$12,000 school. Address The Mayor.

Ark., Helena.—City will arrange to erect \$25,000 school; G. L. Davidson, Jacob Fink and A. N. Tanner, trustees.

Ala., Highland Home.—Church of Disciples of Christ have taken over properties of Highland Home College, Samuel Jordan, president; will make improvements, including installation of water works, electric-light plant, remodeling buildings, erecting new structures, etc.

Ala., Lineville.—Lineville College will erect \$15,000 building.

Ala., Midland City.—A. J. Beverett, Mayor, states that school building recently noted is under construction, superintended by J. J. Harrison, architect, Midland City; two stories; brick; metal roof; hot-air or steam heat; acetylene gas lighting or lamps; cost \$6000. (See "Machinery Wanted.")

Ark., Lake Village.—Lakeside School Board contemplates erection of addition to school and installation of heating, lighting and ventilating systems; cost \$13,000; also plans erection of school for negroes; frame; six classrooms; cost \$6000; plans for both by Theo. M. Sanders, Little Rock, Ark.

Ark., Rogers.—School Board is planning to erect \$50,000 school; G. P. Harben, president.

Ark., Warren.—W. S. Hobbs, chairman of building committee, will receive bids until August 20 for erection of high-school building; three contracts—(1) general, (2) heating and ventilating, (3) plumbing; certified check for \$25 with requests for plans and specifications.

Fla., Miami.—Dade County School Board will receive bids until September 6 for erection of school; reinforced concrete and fireproof construction, or preferably Miami rock; electric wiring; 220x120 feet; two stories and basement; auditorium to seat 1000 students; tile roof or asbestos shingles; cost \$55,000; plans by W. C. De Garmo, Miami. (Previously noted.)

Fla., White Springs.—City contemplates vote on bond issue of about \$5000 for school building; G. S. Mobley, Mayor. (See "Water-works.")

Ga., Atlanta.—City has plans by E. C. Wachendorff, 527 Empire Bldg., Atlanta, for proposed remodeling of two school buildings; brick and wood; cost \$7500 and \$5500.

Ga., Augusta.—Richmond County Board of Education will remodel and enlarge Richmond Academy.

Ga., Carlton.—City voted \$5000 bond issue to erect school. Address The Mayor.

Ga., Lagrange.—Lagrange College will expend \$30,000 to erect gymnasium, school and dormitory recently noted; 50x100 feet; four stories; fireproof construction; steam heat; electric lighting; plans by Park A. Dallas, Atlanta, Ga.; bids opened July 20. Address proposals to J. M. Barnard.

Ga., Macon.—Alexander Free School Board, W. R. Cox, president, appropriated \$10,000 for erection of school at Clinton and North Highlands River Rd.; brick; two stories; constructed to permit erection of additional story; size 75x90 feet; wood; brick veneer; steam heat; gas lighting; cost about \$15,000; architect not selected.

Ky., Elkhart.—Vanderbilt Training School will expend \$4000 in improvements to main building and Elliott Hall dormitory.

Ky., Lexington.—Board of Education will erect model school.

La., Amite.—Deposit of \$10 (not \$100, as recently stated) will be required by applicants for plans and specifications for High School; will receive bids until August 1; plans and specifications on file at office of Contractors and Dealers' Exchange, New Orleans, and of Xavier A. Kramer, architect, Magnolia, Miss.

La., Gretna.—Jefferson Parish School Board will receive bids until August 15 for erection of brick school; certified check for \$100; plans and specifications at office of Stevens & Nelson Company, 1109 Hennen Bldg., New Orleans, La.

La., Kentwood.—City will expend \$30,000 to erect school building; 127x84 feet; ordinary construction; slate roof; hot-air heat; electric lighting; plans by C. J. Hunt, Chattanooga, Tenn. (Bond issue recently noted.)

Md., Baltimore.—Fidelity Construction Co., North and Lexington Sts., is lowest bidder at \$54,300 for erection of addition to No. 60 school; plans by Archer & Allen, Central Savings Bank Bldg., Baltimore. (Recently mentioned.)

Md., Baltimore.—City has plans by Alfred Cookman Leach, 323 North Charles St., Baltimore, for proposed school at Ann St., near Canton Ave.; two stories; brick; 24 rooms; cost \$110,000.

Miss., Starksville.—H. A. Beattie, mayor, will receive plans for addition to public schools; cost \$8000; also for frame negro school to cost \$3000.

N. C., Wilmington.—J. A. Taylor, chairman of building committee, will receive bids until July 22 for erection of brick school; plans and specifications on file at office of J. F. Lettner, architect, Garrell Bldg., Wilmington.

Okla., Tipton.—City voted issuance of \$10,500 bonds for erection of school. Address The Mayor.

Tenn., Raleigh.—Shelby County School Board, Memphis, Tenn., will erect school near Raleigh for pupils of Raleigh, Brooks and Egypt.

Tex., Anderson.—Anderson Independent School District voted \$5000 bond issue to erect school. Address District School Trustees.

Tex., Aransas Pass.—Aransas Pass Inde-

pendent School District voted \$20,000 bond issue to erect school. Address School Board.

Tex., Colorado.—Bids will be received until July 28 for erection of brick stone-trimmed school; contractor to state time of completion and value of old material on ground to be used in erection; certified check for \$500; plans and specifications on file at office of A. O. Watson, architect, Austin, Tex., or City National Bank, Colorado; S. D. Vaughan, secretary, Colorado.

Tex., Grapeland.—City contemplates issuance of bonds to erect school; George Darsey, M. D. Hurchison and others, school trustees.

Tex., Houston.—City Secretary will receive bids until July 25 for erection of eight-room addition to Fannin Schools; work to be let in three separate parts, as follows: (1) General work; (2) plumbing, sewerage and gas-fitting; (3) steam heating; bids to be submitted on blank forms attached to specifications; plans and specifications at office of City Secretary of Houston or of Olle J. Lorehn, architect, of Houston; certified check with general contract bid for 4½ per cent. amount of bid; with other bids for 10 per cent. amount of bid; H. B. Rice, Mayor.

Tex., Mart.—Bids will be received until August 10 for erection of school; certified check for 4 per cent. amount of bid; plans and specifications at office of William Drago, architect, 715 Hennen Bldg., New Orleans, La., and of T. M. Wilson, Mart, Tex.

Tex., Sanderson.—School Board, T. R. Kuykendall, secretary, will receive bids until July 26 for erection of school; two stories; brick; plans and specifications on file at office of Henry T. Phelps, architect, San Antonio, Tex., and at office of secretary.

Tex., Weatherford.—Texas Fairmont Seminary is preparing to erect \$15,000 dormitory.

Tex., Yorktown.—City will erect \$20,000 school; two stories; brick. Address The Mayor.

Va., Lexington.—Washington and Lee University has plans by B. C. Flournoy, 1123 14th St. N. W., Washington, D. C., for dining hall; seating capacity, 200 students; cost \$16,000.

Va., Rural Retreat.—School Board, C. C. Catron, chairman, will receive bids until July 25 for erection of high school; plans and specifications on file at office of Clarence B. Kearfott, Bristol, Va.

Va., Fredericksburg.—Building and grounds committee of State Normal and Industrial School for Women will receive bids until July 27 for furnishing material and erection of administration building; certified check for \$500, payable to R. H. L. Chichester, treasurer; separate bids for heating and ventilating; plans and specifications on file at office of architect, C. M. Robinson, 1025-26-27 Mutual Bldg., Richmond, Va., or may be had on deposit of certified check for \$25; Alden Able, acting chairman.

Va., Richmond.—University College of Medicine has plans by Noland & Baskerville, Richmond, for rebuilding burned college; four stories; brick and steel; 90x135 feet; fireproof; elevators; forced-draught heating and ventilating; cost \$100,000. (Previously noted.)

Va., Wytheville.—Town Council will erect \$10,000 school.

STORES

Ala., Birmingham.—W. B. Leedy & Co. will erect business building; two stories; brick; cost \$10,000.

Ala., Oneonta.—J. A. Brice & Son will erect business building; two stories; 50x56 feet; cost \$4000.

Fla., Jacksonville.—John S. Flanagan, San Antonio, Fla., will erect store and apartment building. (See "Apartment-houses.")

Fla., Tampa.—E. Neve will erect brick business building; two stories.

La., New Orleans.—John J. Zollinger will erect \$2000 building.

Md., Baltimore.—Teofil J. Skalski, 529 South Bond St., will erect two stores and dwellings. (See "Dwellings.")

Md., Baltimore.—Jacob Cohen will receive bids until July 29 for erection of store and dwelling; plans by Jacob F. Gerwig, 210 East Lexington St., Baltimore. (See "Dwellings.")

Md., Baltimore.—Thomas O'Neill of O'Neill & Co., Charles and Lexington Sts., has plans by Baldwin & Pennington, Professional Bldg., Baltimore, for business building at Charles and Franklin Sts.; 142x63 feet; 64 feet high; four stories and basement; Indiana limestone; plate-glass windows; electric elevators; hot-water or steam heat; electric and gas lights; cost \$70,000; awarded contract to C. Ellinger, 36 West 25th St., Baltimore, for demolishing building now on site. (Recently noted.)

N. C., Winston-Salem.—J. A. and C. E. Bennett will erect store at 2d and Liberty Sts.

Okla., Enid.—Waken Bros. will erect business building; two stories; 25x120 feet; brick.

Okla., Enid.—John Vessell will erect business building; two stories; brick.

Okla., Tulsa.—S. G. Kennedy will erect business building; two stories; brick; cost \$16,000.

S. C., Charleston.—Paul E. Trouche will rebuild store building recently reported burned; plans not yet made.

S. C., Columbia.—Murray Drug Co. will open bids August 1 for erection of store building recently noted; 60x104 feet; mill construction; electric lighting; cost \$10,000; plans by Shand & La Faye, Columbia.

Tenn., Knoxville.—Anderson-Dulin-Varnell Company will open bids some time in fall for erection of store building recently noted; 10 stories; 50x120 feet; steel construction; cement floors; brick walls and terra-cotta trimmings; heating and lighting not decided; cost \$150,000; plans by R. F. Graff, Knoxville. Architect may be addressed.

Tex., Dallas.—J. B. Wilson, owner, will probably open bids about October 1 for erection of department-store building (for Titcher-Goettinger Company) recently noted; 50x100 feet; fireproof; plans by Sanguinet & Staats, Fort Worth, Tex.

Tex., Olney.—G. W. Christian and T. E. James will erect business building; 25x70 feet; brick.

Tex., Lockhart.—R. L. Brown will erect brick business building.

Va., Norton.—J. Cohen will expend \$5000 to erect store building recently noted; 25x110 feet; ordinary brick construction; tile floors; glass fronts; heating plant to cost \$1200; no contract; will install cabinets, shelves, showcases and other fixtures.

THEATERS

Md., Baltimore.—Knickerbocker Amusement Co. of New York has plans by Otto G. Simonson, American Bldg., Baltimore, for theater at 404-10 East Baltimore St.; seating capacity 2000; frontage 90 feet.

Tenn., Chattanooga.—Tennessee Realty & Leasing Co., H. T. Sperry, secretary, Nashville, Tenn., will receive proposals on proposed 200x50-foot vaudeville theater; cost within \$25,000; ordinary brick, with wood trusses; plenum blower system heat; electric lighting; arcade entrance; seating capacity 1100; plans by A. Ten Eyck Brown, Forsyth Bldg., Atlanta, Ga. (See "Machinery Wanted.")

WAREHOUSES

Fla., Jacksonville.—Florida Warehouse & Dock Co. incorporated with \$300,000 capital stock; Frank Drew, president, of Live Oak, Fla.; George L. Drew, vice-president; Geo. M. Powell, secretary; Frank Drew, treasurer, all of Jacksonville.

Fla., Jacksonville.—A. Ritzwoller will erect warehouse on water front between Laura and Hogan Sts.; two stories; brick; cost \$15,000.

Fla., St. Augustine.—A. W. Corbett will erect warehouse at foot of Bridge St.; 40x100 feet; corrugated iron.

La., New Orleans.—Illinois Central Railroad, A. S. Baldwin, chief engineer, Chicago, Ill., will, it is reported, erect three warehouses.

Ga., Savannah.—Union Sea Island Cotton Co. organized with \$25,000 capital stock to erect main warehouse in Savannah and branches at various places; J. M. Brewton, president, Claxton, Ga.; D. E. Jones, vice-president, Manassas, Ga.; W. H. Hayes of Savannah, secretary-treasurer.

Md., Baltimore.—Charles J. Bonaparte, 216 St. Paul St., is having plans prepared for erection of warehouse at 6 South Charles St.

Md., Baltimore.—E. B. Hunting, 829 Equitable Bldg., has plans by Henry J. Tinley, 314 North Charles St., Baltimore, for erection of warehouse on South Gay St.; 23x55 feet; four stories; brick.

S. C., Conway.—Farmers' Tobacco Storage Warehouse Co. incorporated with \$2000 capital stock; L. H. Burroughs, president; J. E. Coles, vice-president; W. A. Freeman, secretary and treasurer.

Tex., El Paso.—H. P. Noake will erect warehouse; fireproof; superstructure and floors of steel and concrete; steel windows and door facings.

Tex., Houston.—Nacogdoches Grocery Co. will erect warehouse at Sterrett and Walnut Sts.; three stories and basement; reinforced

concrete; 50x100 feet; cost \$20,000; plans by Lang & Mitchell, Dallas, Tex.

Va., Richmond.—Biswanger & Co. will open bids July 19 for erection of warehouse recently noted; 30x136 feet; five stories; regular construction; cost \$18,000; plans by D. Wiley Anderson, Richmond. (See "Machinery Wanted.")

BUILDING CONTRACTS AWARDED

APARTMENT-HOUSES

Ga., Atlanta.—Lieutenant-Commander Moses, Norfolk Navy-Yard, Portsmouth, Va., awarded contract to G. A. Goodrich (address care of architect) for erection of proposed \$14,000 apartment-house; frame and brick veneer; two stories and basement; two apartments; size 60x50 feet; steam heat; electric and gas lighting; roof garden; plans by A. Ten Eyck Brown, Forsyth Bldg., Atlanta.

Md., Baltimore.—G. Milton Linthicum, 310 Professional Bldg., awarded contract to Monmonier & Sorrell, 308 Laurens St., Baltimore, for remodeling building at 817 Park Ave. for apartment-house and erection of addition.

Tex., Houston.—Geo. A. Byers awarded contract to A. L. Metcalf, Houston, for erection of proposed apartment-house; to have six apartments; wood construction; cost \$6500.

Va., Portsmouth.—E. B. Wilkins, Portsmouth, has contract to remodel Plummer & Hodges residence on North St. into apartment-house; cost \$6250; cost of heating and plumbing \$3000.

Va., Portsmouth.—W. T. Eastwood and A. Rosenbaum awarded contract at \$12,000 for remodeling Odd Fellows' Hall into apartment-house; will erect additional story; three-story porch on each side; bay window on each side of portico.

W. Va., Wheeling.—H. W. Fair, Wheeling, has contract for erection of apartment-house; two stories; brick and stone; fireproof; four apartments of four rooms and bath; cost \$5000.

BANK AND OFFICE BUILDINGS

Fla., Daytona.—Merchants' Bank has awarded contract to W. B. Talley, Jacksonville, Fla., for erection of bank building on South Beach St. (Lately mentioned.)

Ga., Atlanta.—Guarantee Trust & Banking Co. awarded contract to W. E. Washburn, Empire Bldg., Atlanta, for proposed alterations; cost \$15,000; new front, one additional story in rear, and two-story banking-room; plans by A. Ten Eyck Brown, Forsyth Bldg., Atlanta. (See "Machinery Wanted.")

Ga., Douglas.—Union Banking Co. awarded contract to David E. Evans & Co., 11 East Lexington St., Baltimore, Md., for erection of bank and office building recently noted; three stories; 70x100 feet; reinforced concrete; steam heat; electric lighting; cost \$40,000; plans by Bleckley & Macdonald, Atlanta, Ga.

Tenn., Chattanooga.—Hamilton Safe Deposit Co., T. R. Preston, president, recently noted to have awarded contract to Geo. A. Fuller Company, New York, for erection of building, has also let following contracts: To M. T. Rourke & Co., Knoxville, Tenn., for plumbing; Lookout Steam Heating & Supply Co., Chattanooga, for heating; Brown-Ketcham Iron Works, Indianapolis, Ind., for structural steel; Terra-Cotta Co., New York, for ornamental terra-cotta; structure to be 15 stories; 60x100 feet; cost \$300,000.

Va., Petersburg.—Petersburg Benevolent Mechanics' Association awarded contract at \$108,521 to J. W. Davis, Newport News, Va., for erection of library and office building; seven stories; steel construction.

Va., Richmond.—Richmond Building Corporation, A. Blenne Blair, president, awarded contract to Virginia Bridge & Iron Co., Roanoke, Va., for 700 tons of structural steel to be used in erection of Virginia Trust Building; estimated cost \$300,000; John T. Wilson & Co. of Richmond are general contractors; W. Duncan Lee of Richmond is architect. (Previously detailed.)

CHURCHES

Ala., Montgomery.—First Church of Christ, Scientists, awarded contract for erection of church at 16 High St.; 56x128 feet; brick veneer; cost \$5000. Address The Reader, First Church of Christ, Scientists.

Ky., Paris.—Methodist Church committee has awarded contract at \$14,977 to A. N. Powell, Winchester, Ky., for rebuilding burned church edifice; plans by S. E. Desjardins, Cincinnati, O.

Mo., Kansas City.—Grand Avenue Methodist Episcopal Church, Rev. Edwin R. Olmstead, pastor, awarded contract to James Black Masonry & Contracting Co., Wright Bldg., St. Louis, Mo., for erection of edifice and office building; 96x115 feet; office building to be 12 stories high; church up to third or fourth story of office building; cost of entire building, \$375,000; plans by John W. McKecknie, Kansas City. (Contract recently incorrectly noted awarded to James Black and I. T. Cook.)

Va., Hopkins.—Hunting Creek Methodist Protestant Church will expend \$4000 on proposed structure; to be completed by September 1; plans by Price Bros., Atlantic Highlands, N. J.; frame building; 32x44-foot auditorium; 16x30-foot Sunday-school room; contractor, Parksley Lumber Co., Parksley, Va.

Va., Parksley.—Grace Methodist Protestant Church, H. T. Mason, member of committee, awarded contract to W. W. Keenan, Charlottesville, Va., for erection of edifice previously described; main auditorium, 45x45 feet; Sunday-school room, 32x50 feet; pastor's study, 12x12 feet; brick structure, with concrete foundation and bluestone trimmings; to be completed by December 15; steam heat; electric lighting; cost \$12,000; plans by G. R. Ragan, Salem, Va.

CITY AND COUNTY

Tenn., Memphis.—Engine-houses.—City awarded contract to J. E. Hollingsworth, Memphis, for constructing two engine-houses; at \$15,953 for double engine-house at Lucy Ave. and Latham St., and at \$12,888 for single house at Lamar Ave. near Woodward St. (City lately mentioned as receiving bids.)

Tex., Palestine.—Fire Station.—City awarded contract at \$14,955 to John Gaught, Palestine, for erection of fire station at Crawford and Palmer Sts.; James F. Brook, Palestine, supervising architect. (Recently mentioned.)

COURTHOUSES

N. C., Greenville.—Pitt County Commissioners, through Milburn, Heister & Co., architects, Home Life Bldg., Washington, D. C., awarded contract at \$74,984 to Central Carolina Construction Co. of Greensboro, N. C., for erection of courthouse and jail previously noted; building to be completed within 10 months.

DWELLINGS

Fla., Jacksonville.—Herbert B. Race awarded contract for erection of eight-room dwelling recently noted; brick and stucco; steam heating; cost \$7000.

Fla., Wellborn.—R. M. Carver awarded contract to Mr. Walters, Wellborn, to erect two-story 10-room dwelling.

Ga., Atlanta.—Mrs. C. W. Asbury has plans by and awarded contract to G. R. Bond, 404 Peters Bldg., Atlanta, for erection of proposed dwelling; eight rooms; two stories; 35x60 feet; frame; hot-air heat; gas and electric lighting; cost \$5000.

Ga., Atlanta.—J. H. Deering awarded contract to G. R. Bond, 404 Peters Bldg., Atlanta, for erection of proposed dwelling; six rooms; one story; 36x60 feet; frame; fireplaces; gas and electric lighting; cost \$3000; plans by Cooksey & Maxwell, 815 Forsythe St., Atlanta.

Md., Baltimore.—Allen L. Carter, 3902 North Charles St., awarded contract to J. F. Carter, Pimlico Blvd., near Glen Ave., Baltimore, for erection of addition to residence; cost \$4500.

Md., Baltimore.—Harrison McMains, 315 Dolphin St., awarded contract to John Sheridan, 806 North Carrollton Ave., Baltimore, for erection of dwelling; two and a half stories; frame; cost \$6000.

Md., Baltimore.—Hilton Land Co. awarded contract to Henry C. Glantz, 3218 Auchentoroly Ter., Baltimore, for erection of four two-story brick dwellings on 11th St., between Presbury and Grason Sts.; 16x52 feet; cost \$12,000.

Tex., Dallas.—S. G. Lett has plans by and awarded contract to C. M. Blakowski, Dallas, for erection of residence; frame; cost \$5000.

Tex., Waxahatchie.—L. E. Fowler awarded contract to H. W. Mabson, Waxahatchie for erection of proposed dwelling; 50x60 feet; brick and frame; fireplaces; cost \$6500; plans by E. S. Bage, Waxahatchie.

Va., Lynchburg.—Lawrence McWane awarded contract to W. K. Barger, Lynchburg, for erection of residence; two stories and basement; 12 rooms; cost \$8500; plans by McLaughlin, Pettit & Johnson, Lynchburg.

Va., Norfolk.—E. J. Vellins will expend \$3500 to erect dwelling; 12 rooms, cellar and attic; mill construction; heating to cost \$250; lighting to cost \$125; contract recently noted awarded to J. E. Newman, East Rap-

pahannock Ave., Norfolk. (See "Machinery Wanted.")

Va., Petersburg.—W. W. Hines awarded contract to Nicholson & Gillespie, Petersburg, for erection of \$7500 brick residence; plans by M. P. Andrews & Co., Petersburg.

Va., Petersburg.—E. J. Andrews awarded contract to J. T. D'Alton, Petersburg, for erection of double tenement-house; cost \$3600; plans by M. P. Andrews & Co., Petersburg.

W. Va., Thomas.—Davis Coal & Coke Co., Cumberland, Md., awarded contract to Nikola Construction Co., Pittsburg, Pa., for erection of 50 double houses on Thomas Hill, 50 at Coketon Shaft, 50 on Pendleton Run and 100 at Sand Run Shaft.

GOVERNMENT AND STATE

Fla., Fort Barrancas.—Guardhouse.—Henry Monk, Pensacola, Fla., has contract to erect addition to guardhouse recently noted; estimated cost \$10,000. (See "Machinery Wanted.")

Tex., Dallas.—State Fair Commission is proceeding with erection of fair buildings recently noted; 150x250 feet; combined coliseum and auditorium; fireproof, iron and steel; heating not decided; lighting plant to cost \$8000; cost of buildings, \$100,000; plans by C. D. Hill & Co., Dallas; contract awarded to W. R. Hatcher, Dallas.

HOTELS

Fla., Kissimmee.—R. B. Savage awarded contract to Frank Bass, Kissimmee, for erection of 50-room cement hotel.

Fla., St. Augustine.—Hotel Marion awarded contract to Fred Walton, St. Augustine, for erection of four-story addition and additional story to present structure; electric elevator; tower on northeast corner.

Md., Baltimore.—John Nixon, 312 West Fayette St., awarded contract to J. Elmer Stanfield, 212 North Payson St., Baltimore, for rebuilding Nixon Hotel; 22 feet 9 inches by 57 feet 1 inch; slag roof; steam heat; cost \$18,000. (Recently mentioned.)

Tex., Alvin.—Alvin Hotel Co. awarded contract to M. C. Bowden, Galveston, Tex., for erection of two-story hotel recently noted; cost \$15,000; 60x120 feet; brick; lobby, dining-room, kitchen, etc., on first floor; 30 rooms above; iron work, plate glass, sheet-metal work, composition roofing and lighting fixtures; contract let July 14; structure to be completed in 100 working days; plans by R. D. Steele, Houston, Tex. (See "Stores" and "Machinery Wanted.")

Tex., Houston.—Rendler Building Co. awarded contract to Fred A. Jones Construction Co., Houston, for erection of hotel; 10 stories; foundation to support 20 stories; 100x125 feet. (Previously mentioned.)

MISCELLANEOUS STRUCTURES

D. C., Washington.—Riding Academy.—Washington Riding Club awarded contract to Arthur Cowell, 723 15th St. N. W., Washington, for alterations to riding academy recently noted; ordinary construction; steam heat; electric lighting; cost \$30,000; plans by G. Oakley Totten, Jr., 808 17th St., Washington. (See "Machinery Wanted.")

La., Mansfield.—Fair Buildings.—De Soto Parish Fair Association awarded contract to Nicholson Construction Co. (address care of architect) for erection of fair buildings recently noted; mill construction; electric lighting; cost \$10,000; plans by Ben Hawkins, Mansfield.

Md., Baltimore.—Hospital.—Benjamin F. Bennett Bldg. Co., 123 South Howard St., Baltimore, has contract and is preparing to begin erection of proposed one-story addition to Johns Hopkins Hospital at Monument and Wolfe Sts.; building will be of brick; bluestone trimmings; 33x42 feet; hot-water heat; cost \$12,000; will be used as pathological laboratory; plans by Archer & Allen, 47-48 Central Savings Bank Bldg., Baltimore.

W. Va., Elkins.—Home.—Children's Home for West Virginia Humane Society awarded contract to Enterprise Construction Co. of Elkins to erect children's home; main building 86x36 feet, two stories, with L 50x30 feet, one story; basement under entire structure; pressed brick; stone foundation; slate and composition roof; gas and electric lighting; hot-water heat; estimated cost \$10,000; plans by Holmboe & Lafferty, Clarksburg, W. Va. (Further facts recently mentioned.)

RAILWAY STATIONS

Mo., St. Louis.—Illinois Traction system awarded contract to Kremer & Volral, St. Louis, Mo., for erection of express station; two stories; brick; cost about \$45,000.

SCHOOLS

Fla., Key West.—Ruth Hargrove Institute awarded contract to Ferguson & Ward, Key West, for erection of building; roof garden to accommodate 1500 people; cost \$25,000.

Fla., St. Cloud.—Town Council awarded contract for erection of proposed \$4000 school.

Fla., St. Petersburg.—City awarded contract to W. C. Henry of St. Petersburg for erection of high school; doric style; 127x89 feet; stone porch supported by four doric columns 27½ feet high; 32 windows each in rear and front and 22 windows on each side; round-roofed dome directly above center lighted by 12 windows; red brick construction; 20 rooms, including auditorium 70x40 feet; plans by Bonfoey & Elliott, Tampa, Fla.; cost \$22,035. (Recently mentioned.)

Miss., Hazlehurst.—City will expend \$10,000 to erect school building; 33x75 feet; three stories; ordinary construction; plans by R. H. Hunt, Chattanooga, Tenn.; contract for erection recently noted awarded to J. F. Barnes, Jackson, Miss., and for heating plant to C. C. Hartwell & Co., New Orleans, La. (See "Machinery Wanted.")

Mo., Joplin.—Board of Education awarded contract at \$6199 to J. R. Thomas, Joplin, for erection of two-room addition to Columbia school; cost of installation of plumbing \$1872; plans by Garstang & Read, Joplin.

N. C., Oxford.—Board of Education awarded contract to Fegerman & Turner, Oxford, for erection of 79x116-foot high-school building; cost \$18,200; electric wiring; slate roof; structural-iron roof supports; plans by Linthicum & Roper, Durham, N. C. (Recently incorrectly noted. See "Machinery Wanted.")

Okla., Hitehook.—School District No. 29 awarded contract to Lisle Denning Construction Co., Oklahoma City, Okla., for erection of proposed school building; two stories; 42x72 feet; fireproof construction; steam heat; cost \$5500; plans by A. A. Crowell, Enid, Okla.

Tenn., Germantown.—Shelby County School Board awarded contract at \$12,985 to W. W. McGinnis, Memphis, Tenn., for erection of proposed school.

Tex., Austin.—University of Texas is reported to have awarded contract to James A. Stewart & Co. of St. Louis, Mo., for carpentry and masonry work on proposed library building; plans by Cass Gilbert, 11 East 24th St., New York.

Tex., Spofford.—Spofford District School Trustees awarded contract for erection of school; two stories; frame; cost \$3500.

Tex., Tomball.—City awarded contract at \$5250 to J. L. Bailey for erection of two-story brick school.

Va., Hollins.—Hollins Institute awarded contract to J. F. Barbour & Co., Roanoke, Va., for erection of hospital previously noted; 40x63 feet; three stories; ordinary construction; steam heat; electric lighting; cost \$16,000; plans by Huggins & Bates, Roanoke, Va.

STORES

Ala., Birmingham.—Young & Van Supply Co. awarded contract to H. A. Stockmar, Birmingham, for erection of business building; three stories and basement, with two-story section and one-story warehouse; reinforced concrete; plans by H. B. Wheelock, Birmingham.

La., Shreveport.—Hutchinson Bros. have awarded contract to Tom Green, Shreveport, for erection of store; four stories; brick; cost \$57,000.

Md., Baltimore.—Leonard Kresge, 221 West Lexington St., awarded contract to William F. Welsh, 250 West Preston St., Baltimore, for alterations to store at Lexington St. and Park Ave.; cost \$5000.

S. C., Timmonsville.—Hill Bros. awarded contract to B. W. Eubanks for erection of store buildings recently noted; two-story 20x60-foot structures; cost \$1000 each; ordinary construction with concrete floor; electric lighting.

Tex., Alvin.—Steve Jones awarded contract to M. C. Bowden, Galveston, Tex., for erection of business building recently noted; lower floor, three stories; upper floor, 20 additional rooms for Alvin Hotel, adjoining; size 64x75 feet; cost \$8400; plans by R. D. Steele, Houston, Tex. (See "Hotels.")

Tex., Houston.—Bering-Cortes Hardware Co. awarded contract to James A. Stewart & Co. of St. Louis, Mo., for erection of store building; reinforced concrete; fireproof; cost \$80,000 to \$100,000; plans by Sanguinette, Staats & A. E. Barnes of Houston. (Previously reported.)

Tex., Houston.—James Shapley & Sons, Houston, have contract for erection of proposed Maciee Bldg.; two stories.

Va., Roanoke.—J. R. Weaver will expend \$10,000 to erect store building; three stories; 25x32 feet; ordinary construction; steam heat; electric lighting; plans by H. M. Miller, Roanoke; contract recently noted awarded to J. F. Barbour & Co., Roanoke.

THEATERS

Tenn., Knoxville.—J. F. Rogers has plans by and awarded contract to W. O. Seats, Nashville, Tenn., for erection of theater; 50x100 feet; 35-foot ceiling; glass brick; green-glass brick base at front; white-glass bricks above; two Ionic burnished-copper columns, with caps and verdantique bases on either side of lobby; tower 56 feet high over stage; mechanical heating, ventilating and cooling system; awarded contract for brickwork to W. A. Gervin, Knoxville; four proscenium boxes and three mezzanine boxes on either side; cost \$30,000. (Recently mentioned.)

WAREHOUSES

Ark., Little Rock.—George Neimeyer has awarded contract to W. A. Stanton, Little Rock, for erection of warehouse at foot of Arch St.; concrete; 40x50 feet; cost \$10,000.

Va., Richmond.—Standard Paper Manufacturing Co. awarded contract to J. T. Nuckols, Richmond, for erection of warehouse; two stories; 80x120 feet; ordinary wood construction; cost \$20,000; plans by Carneal & Johnson, Richmond. (Previously mentioned.)

RAILROAD CONSTRUCTION

RAILWAYS

Ala., Birmingham.—The Illinois Central Railroad will have charge of the relocation of the Birmingham Belt Line from Tenth to Twenty-second Ave., nearly two and one-half miles. A press report says it is understood that the Vance Contracting Co. has secured the contract at about \$85,000 for the grading through Norwood. A. S. Baldwin is chief engineer of the Illinois Central at No. 1 Park Row, Chicago, Ill.

Ala., Centerville.—H. E. Reynolds, secretary, and also one of the incorporators and directors, says that the Birmingham, Selma & Pensacola Railway proposes to build a line from Centerville to Selma, 45 miles, and also from Blocton to Centerville, 15 miles. The route is from Birmingham to Bessemer, Blocton, Centerville and Selma, and thence to Pensacola, Fla., with a branch to Marion, Ala. An iron bridge over the Cahaba River and several wooden trestles will be required. The incorporators and directors are: President, J. C. Suttle of Vicksburg, Ala.; treasurer and general manager, A. J. Weaver of Brent, Ala.; secretary, H. E. Reynolds of Centerville, Ala., and J. T. Ellison, also of Centerville.

Ala., Demopolis.—A movement is under way to build a railroad from Demopolis to Linden, Ala., and M. P. Hillier of New York city is reported interested. They contemplate, it is said, building from Birmingham, Ala., to Scranton, Miss. President A. R. Smith of the Demopolis Business League may be able to give information.

Ala., Anniston.—Henry C. Allen of Anniston, according to a press report, will make a survey for an extension of the railroad owned by the Bass Foundry and Machine Works of Rock Run, now operated between that place and Spring Gardens.

Ark., Fort Smith.—The St. Louis, Fort Smith & Dallas Railroad Co. has been chartered at Oklahoma City to build a line 60 miles long in Oklahoma via Arkona, a new town on the Poteau River, and running from Fort Smith to Wilburton, Okla.; capital \$50,000. Incorporators are M. C. Burke and John H. Vaughn of Fort Smith, Ark.; R. S. Willie and R. C. Alexander of Rogers, Ark.; R. E. Reynolds and W. W. Murray of Arkona, Okla.

Ark., Marianna.—The Marianna & Southwestern Railroad Co., which has built a line from Big Creek to Heth, proposes to build an extension from Heth to Marianna, Ark., thence to Obery, on the Missouri & North Arkansas Railroad, 35 miles, and later via Pine Bluff to connect with the Rock Island between Fordyce and Hope, Ark. The officers are J. T. Robertson, president; H. F. Roleson, vice-president and attorney, both at Marianna, Ark. W. B. Mann of Marianna and P. C. Allen of Memphis, Tenn., are also prominently interested. W. E. Ayres of Memphis is to make survey.

Ark., Rogers.—The Rogers, Bentonville & Decatur Interurban Railway Co. is reported to have begun survey at Cave Springs for the proposed line which will connect the three points named in the title. J. D. Houseman and G. G. Sutherland of St. Louis are among those interested.

Fla., Pensacola.—Henry McLaughlin is reported to have let contract to C. W. Merritt of Pensacola for grading on the Pensacola, Mobile & New Orleans Railroad from Loxley, Ala., to Mobile Bay, 10 miles. The same contractor had the grading from the Perdido River to Loxley. Mr. McLaughlin is also reported to have contracted to build a bridge and branch railroad across Perdido Bay to Lillian, Ala., about eight miles, connecting at Millview with the main line.

Ga., Savannah.—The Savannah & Southwestern Railroad Co., capital \$1,000,000, has been granted a charter to build a line from Savannah to Fort Gaines, Ga., about 230 miles. It will run through 11 counties. The incorporators are F. R. Durden and E. M. Frank of Savannah, Ga.; W. P. Kieckhefer of Bryan county; C. S. Price, N. A. Haggard, W. G. Parnell, G. W. De Loach, D. M. Bradley, J. H. Perkins, W. C. Perkins, C. W. Smith, J. V. Kelley, S. T. Ellis, M. A. Smith, P. M. Anderson, all of Tattnall county.

Ga., St. Marys.—L. Johnson, president and general manager of the St. Marys & Kingsland Railroad, is quoted as saying that arrangements will soon be made for an extension from Kingsland to Waycross, 47 miles. Address, St. Marys, Ga.

Ky., Jackson.—The Monday Construction Co., M. C. Monday, president, is reported to have the contract for the three-mile extension of the Lexington & Eastern Railroad and is building considerable concrete work.

Ky., Somerset.—Cecil Williams, secretary, says that citizens of Somerset have decided to build a railroad via Somerset from Corbin to Hopkinsville, Ky. Foreign capital has made a fair proposition, and it is intended to first build from Corbin to Somerset, 35 miles, and thence to the Cumberland River, 7 miles. Survey and right-of-way work will begin immediately.

La., Baton Rouge.—The Illinois Central Railroad, according to a report in transportation circles, contemplates building large terminals at Baton Rouge. A. S. Baldwin is chief engineer at Chicago, Ill.

La., Hammond.—The New Orleans, Natchez & Natchez Railroad, says a dispatch, has completed survey for an extension from Kentwood to Baton Rouge. F. L. Pantall is traffic manager and purchasing agent and O. L. Benway secretary and treasurer at Hammond, La.

La., Lake Arthur.—The Jennings Construction Co. is reported chartered to build the Lake Arthur, Jennings & Northern Railroad from Lake Arthur to connect with the Frisco system; capital \$500,000. The incorporators include G. B. Zigler, president; D. Helbert, first vice-president; H. A. Housiere, second vice-president; C. D. Andrus, secretary; W. B. Conover, treasurer; E. P. Fox, general manager; R. B. Bliss and G. A. Courtney.

La., Mansfield.—The J. L. Logan Lumber Co., according to a dispatch, will build a standard-gauge logging railroad from Pelican into pine timber lands, altogether about 15 miles.

La., New Orleans.—Rumored that work will soon be resumed to complete the large terminals at Chalmette, near New Orleans, to be used by the St. Louis & San Francisco Railroad. F. G. Jonah is chief engineer of construction at St. Louis, Mo.

Miss., Cude.—A dispatch says that preliminary survey will be made immediately by Henry M. Thayer for the proposed railroad to connect Tutwiler, Cude and Yazoo City. W. J. Cude is president, Arthur B. Ransom vice-president, Luke Lea treasurer, and J. F. Gerlicher secretary.

Miss., Gulfport.—An officer of the Gulfport & Mississippi Coast Traction Co. denies the report that it is contemplated to build an extension to Henderson's Point.

Miss., Jackson.—With reference to the report that the New Orleans Great Northern Railroad would build an extension from Jackson, Miss., to near Memphis, Tenn., a prominent officer says that it has no plans for extending north of Jackson at this time.

Mo., Jefferson City.—An officer of the Missouri Pacific Railway is quoted as saying that contract has been let to T. B. Jones & Co. for five miles of second track between Jefferson City and Coal Junction, including reconstruction of the terminal at Jefferson City.

Mo., Joplin.—The Missouri, Kansas & Texas Railway, it is reported, will begin work immediately upon a connecting railroad nearly three miles long from the main line near Chiltwood to the Union Depot property. The work will include three trestles. Extensive yards are also contemplated. S. B. Fisher is chief engineer at St. Louis, Mo.

Mo., St. Joseph.—The St. Joseph & Savannah Interurban Railway Co. will build 10

miles of line from St. Joseph to Savannah. The J. H. Flick Construction Co. of Chicago is the contractor and Charles W. Campbell is chief engineer and John H. Van Brunt president at St. Joseph, Mo.

Mo., St. Louis.—D. C. Nevin, president of the St. Louis-Kansas City Electric Railway Co., Commerce Bldg., Kansas City, Mo., is reported as saying in a cablegram that bonds have been sold in Paris. The sale is reported approved by the directors. Survey has been made for 75 per cent. of the route. The line will be via Columbia, Marshall, Higginsville, Odessa and other points. It will be about 250 miles long.

N. C., Statesville.—R. L. Greenlee of Marion, N. C., is reported to have begun a permanent survey for the proposed Statesville Air Line Railroad from Statesville to Mt. Airy, N. C.

Okla., Ardmore.—President Oscar O. Ayres of the Arbuckle & Western Railroad Co. says that the bonds are arranged for to build the line as soon as the rights of way are in legal form. The necessary rights are assured.

Okla., Chickasha.—The Oklahoma Central Railway, according to a report quoting an officer, will build its own terminals at Chickasha. F. C. Hand is chief engineer at Purcell, Okla.

Okla., Fairview.—The Fairview & Oklahoma City Railway Co., capital \$100,000, has been chartered to build a line from Fairview to Musk, 4½ miles. The incorporators are O. E. Snyder of Oklahoma City, president; H. A. Noah, secretary; M. M. Fulkerson, treasurer, both of Alva; W. D. Bowling, H. A. Bower, H. Clay Willis, all of Fairview, vice-presidents; W. B. Noble, Alva, and S. B. Moore, Oklahoma City.

Okla., Texoma.—The Shumway Construction Co. of New York, according to a dispatch, will begin work immediately on the Denver & Gulf Railroad, which is to be constructed from Texoma to Lamar, Col. At present 55 miles are to be built from Lamar southward.

S. C., Aiken.—James U. Jackson of Augusta, Ga., according to a report from Columbia, says that plans are under way to build the proposed extension of the Augusta & Aiken Railway from Aiken to Columbia, about 50 miles.

S. C., Georgetown.—The Waccamaw Transportation Co., recently reported chartered by A. A. Springs and others, is for a steamboat line, and not a railroad.

Tenn., Athens.—J. B. Wright, president of the Athens & Tellico Railway, is reported as saying that arrangements have been made to build an extension of two miles to the center of this town. A dispatch also says that the McDowell Construction Co. has a contract for about \$50,000 for filling in, trestles and reconstruction. Headquarters are at Athens, Tenn.

Tenn., Jackson.—An officer of the Nashville, Chattanooga & St. Louis Railway writes that there is no truth in the statement that the company will improve its line between Jackson, Tenn., and Paducah, Ky.

Tenn., Memphis.—The Tennessee Traction Co., it is reported, has completed preliminary surveys for its proposed line from Memphis to Jackson, Tenn., about 75 miles, and is now securing rights of way via Bartlett and Brownsville. W. K. Burton is president, Hugh Spencer secretary and George M. Boshnell general manager and chief engineer, all at Memphis.

Tex., Amarillo.—The Rock Island, Texico, Farwell & Gulf Railway Co. is reported chartered in New Mexico to build a line in connection with the Texas roads of the Rock Island system. J. B. Berry is chief engineer at Chicago, Ill.

Tenn., Knoxville.—An officer confirms the report that the Knoxville, Sevierville & East Tennessee Railway will build an extension south east 15 miles into timber. The work will probably be done by the company's forces; if not, contract may be let within 60 days.

Tex., Crosbyton.—The Crosbyton-South Plains Railroad Co. will build 40 miles of line from Lubbock to Crosbyton. W. H. Denison of Lubbock, Tex., has been awarded the contract for grading and tracklaying. P. C. Conley is president; J. M. Bassett, vice-president and general manager; R. M. Bassett, treasurer, and John A. Knox, chief engineer at Crosbyton, Tex.

Tex., Longview.—An officer of the Gulf, Colorado & Santa Fe Railway says that no surveys are being made nor are any contemplated soon for an extension north of Longview. This denies recent press reports relating to an extension to the Cass county coal fields.

Tex., San Benito.—A report says that 11 miles of grading are completed out of San Benito on the San Benito & Rio Grand

Railroad, and the culverts thereon have also been constructed. J. W. Davis, contractor, is continuing grading. S. A. Robertson of San Benito is promoting the plan.

Tex., Stamford.—A dispatch says that P. F. Burns, engineer, will have charge of survey of the Stamford & Eastern Railway, which will begin immediately from Stamford eastward to coal fields.

Tex., Wichita Falls.—The Texas Construction Co., it is reported, has been given contract to erect a union terminal for \$75,000. J. A. Kemp and Frank Kell of the Wichita Falls & Northwestern Railway are interested.

Va., Fredericksburg.—A dispatch says that the Richmond & Chesapeake Bay Railway Co. of Richmond has made a survey between Ashland and Fredericksburg for its proposed extension. Between Fredericksburg and Washington, D. C., one line was run via Manassas and Fairfax Court House and the other parallel to the Richmond, Fredericksburg & Potomac Railroad.

Va., Harrisonburg.—It is again rumored that the Chesapeake Western Railway will build an extension of about 40 miles to Deerfield, Va. W. E. D. Stokes is president and general manager at 73d St. and Broadway, New York city.

Va., Keokee.—Reported that the Calvin Pardee Company of Philadelphia will build a railroad about three miles from Sigma, on the Black Mountain Railway, to Little Black Mountain, grading to begin about August 15.

Va., Norfolk.—Permit has been requested to begin construction of the proposed union station to be occupied by the Norfolk & Western, the Norfolk & Southern and the Virginian railways. L. E. Johnson of Roanoke, Va., is president of the Norfolk Terminal Co. H. Fernstrom, chief engineer of the Virginian Railway at Norfolk, Va., may also be able to give information.

W. Va., Beckley.—The Virginian Railway, according to a press dispatch, has issued bonds to build a branch from Harper via Beckley and Mt. Hope to Paintsville. H. Fernstrom is chief engineer at Norfolk, Va.

W. Va., Charleston.—The Mingo Railway Co. of Charleston is chartered to build a line from Lenore, on Pigeon Creek, on the Tug Fork of the Big Sandy River, to the mouth of Gilbert's Creek, on the Guyandotte River; capital \$50,000. The incorporators are Simon P. Richmond, V. L. Black, L. G. Sumnerfield, August W. McDonald and George S. Conch, Jr., all of Charleston, W. Va.

W. Va., Fairmont.—An officer of the Little Kanawha Syndicate says that it is contemplated to build the State Line & Southern Railroad, 21 miles long, from Rivesville, W. Va., to the Pennsylvania State boundary, in the near future.

W. Va., Huntington.—The Cincinnati & Pittsburgh Electric Railway Co. has been incorporated under Delaware laws with \$1,000,000 capital to build a line from Cincinnati, O., to Pittsburgh, Pa. The incorporators, who are all residents of Huntington, W. Va., are A. E. Cox, F. S. Kanole, A. W. Werniger, C. P. Sanborn and C. R. Wyatt.

W. Va., Romney.—Ira V. Cowgill and R. P. Monroe, according to a dispatch, have applied for an electric-railway franchise in Hampshire county over the county road and Northwestern turnpike from Romney, via Augusta, Pleasant Dale, Hanging Rock and Capon Bridge, to the Virginia boundary line on the way to Winchester, Va., 55 or 60 miles distant.

W. Va., Wheeling.—The Pittsburgh, Steubenville & Wheeling Street Railway Co. is reported chartered in Pennsylvania to build an electric railway connecting the three points named. A preliminary line four miles long is to be built between Dormont and Bridgeville; capital \$40,000. The address of the incorporators is W. E. Hildebrand, Oliver Bldg., Pittsburgh, Pa.; president; John F. Klein, Carnegie, Pa.; C. W. Behney, Cecil, Pa.

STREET RAILWAYS

Tex., Dallas.—George W. Works and associates have applied to the City Commissioners for a street-railway franchise to build a line in the northeastern part of the city.

Steel Plate Construction.

Supplement No. 19 to its general book of views of modern blast furnaces which it has recently built is being distributed by the William B. Pollock Company, Youngstown, O. This company manufactures steel-plate construction of blast furnaces, steel works, etc., Berg improved cinder cars, metal mixers, ladles, etc., and the supplement referred to presents a number of views of new stores which the company has recently erected for the New Jersey Zinc Co. at Palmerton, Pa.

MACHINERY, PROPOSALS AND SUPPLIES WANTED

Manufacturers and others in need of machinery or supplies of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery or supplies needed we will make their wants known free of cost, and in this way secure the attention of manufacturers and dealers throughout the country. The Manufacturers' Record has received during the week the following particulars as to machinery and supplies wanted.

Belting and Shafting.—Fairview Cement Co., Box 447, Fairview, Okla., wants belting and shafting.

Blackboards.—E. M. Cook, Hazlehurst, Miss., wants prices on blackboards.

Boiler.—Huettel Coal & Coke Co., E. H. Ould, president, Norton, Va., wants prices (delivered) on 150-horse-power tubular boiler to be used in connection with 75-kilowatt or 100-kilowatt generator.

Boiler.—See "Locomotive."

Boiler.—See "Mining Machinery."

Boiler.—Fairview Cement Co., Box 447, Fairview, Okla., wants 200-horse-power compound boiler.

Boilers.—John G. Duncan Company, 303 West Jackson Ave., Knoxville, Tenn., wants dealers' and consumers' or users' prices on 15 and 150-horse-power high-pressure return-tubular boilers with fixtures, complete; second-hand; immediate shipment; give cost delivered Knoxville or lowest freight rate; also weight.

Boilers.—W. A. Wickliffe, Greenville, Ky., wants prices on boilers.

Boilers and Condensers.—Bids will be received until August 15 by Board of Public Works, Key West, Fla., for furnishing two standard Scotch stationary boilers and one condenser, delivered on dock at Key West; specifications furnished on request. Address William R. Porter, chairman.

Bridge Construction.—Palm Beach County Commissioners, W. H. DaCamara, chairman, West Palm Beach, Fla., will open bids July 28 for constructing bridge across canal at Delray, Fla., according to plans and specifications on file in office of clerk of Circuit Court, Fred E. Fenne; each bid to be accompanied by certified check for \$200.

Bridge Construction.—B. A. Fuson, Judge Bell County Court, Pineville, Ky., will open bids July 25 for flooring and repairing wagon bridge across Cumberland River at foot of Pine St.; bids to be for work complete, including material, according to specifications on file with County Judge.

Bridge Construction.—F. L. Portlock, road engineer for Norfolk county, 240 Monticello Arcade, Norfolk, Va., invites plans, specifications and bids for construction of drive bridge over branch of Tanners Creek, on line of Reservoir Ave. ext.; bridge to be 315 feet long and 18 feet wide; also bids are invited for removing 2000 cubic yards of earth for approaches to bridge and fills on roadbed. For further information address Mr. Portlock.

Bronze.—See "Building Materials."

Building Materials, etc.—M. C. Bowden, contractor, Galveston, Tex., will purchase iron work, plate glass, sheet-metal work, composition roofing, skylights and lighting fixtures for hotel and store buildings at Alvin, Tex.

Building Materials.—A. Ten Eyck Brown, Forsyth Bldg., Atlanta, Ga., wants prices on marble, bronze, ornamental plaster and ornamental iron.

Building Materials.—L. B. Turner, Oxford, N. C., wants prices on lime, cement, structural iron and steel, gypsum plaster, nails, slate, brick, lumber, wood columns and aqueduct.

Building Materials.—W. A. Wickliffe, Greenville, Ky., wants prices on building materials.

Bulldozers.—Saino Fire Door & Shutter Co., W. F. Dunbar, secretary-treasurer, Tennessee Trust Bldg., Memphis, Tenn., wants catalogues and prices on bulldozers.

Cannery.—Cuba Canning Factory, L. Poole, president, Cuba, Ala., wants equipment for canning; capacity, 10,000 to 12,000 cans per 10 hours.

Canal Construction.—Bids will be received

July 26 at office of County Court Clerk of Mississippi county, Osceola, Ark., by Willis E. Ayres, chief engineer, for construction of 75 miles of drainage canals, about 3,170,000 cubic yards; certified check \$3000; plans, profiles and specifications on file with County Court Clerk at Osceola and of Willis E. Ayres, consulting and constructing engineer, Randolph Bldg., Memphis, Tenn.; J. T. Coston, attorney, Osceola.

Clay.—Metropolitan Buyers, T. C. Raine, manager, Flatiron Bldg., New York, want samples and prices per gross on Mexican clay for making cigar moisteners; clay for export.

Coffee-roasting Outfit.—William H. Foster, Gadsden, Ala., wants to correspond relative to coffee-roasting outfit.

Copper Ingots, etc.—D. Blumann, Postgasse 6, Vienna, Austria, wants to correspond relative to representing American rolling mills and wholesalers offering copper ingots, blocks, cakes, wire bars, etc.; wants to represent for sales in Germany and Austria-Hungary or Germany only.

Creamery Machinery.—Alex. B. Murray, Petersburg, Va., wants creamery machinery.

Cotton-waste Machinery.—L. L. Wagon, care of Union Grocery Co., Main and Bachelor Sts., Union, S. C., wants information on cotton-waste manufacture and necessary machinery.

Derrick Irons.—Henry Monk, Pensacola, Fla., wants derrick irons.

Desks.—See "School Furniture."

Dumbwaiter.—Binswanger & Co., Richmond, Va., wants prices on dumbwaiter.

Electrical Machinery.—See "Mining Machinery."

Electrical Machinery.—Sherman Steam Marble and Granite Works, 259 West Lamar St., Sherman, Tex., wants following new or second-hand 230-volt direct-current motors: One ½ to 1 horse-power, one 5 horse-power, one about 7½ horse-power; wants controllers with two larger motors.

Elevators.—Binswanger & Co., Richmond, Va., wants prices on elevators.

Elevator.—Thos. H. Pitt, Atlanta Bank Bldg., Atlanta, Ga., wants prices on freight elevator for automobiles; 8x18 feet; for three-story building.

Engine.—See "Water-works."

Engine.—Fairview Cement Co., Box 447, Fairview, Okla., wants 140-horse-power Corliss engine.

Engines.—J. P. Clevenger, Clevenger, Tex., wants two engines; one 12-inch by 24-inch, side crank, for heavy use, to drive sawmill; one 12-inch by 18-inch, for planer; both high speed; no boilers. (See "Sawmill.")

Engine.—Huettel Coal & Coke Co., E. H. Ould, president, Norton, Va., wants prices (delivered) on 14x14 or 16x16 engine.

Engines.—W. A. Wickliffe, Greenville, Ky., wants prices on engines.

Farm Implements.—See "Peanut Machinery."

Feed-grinding Machinery.—Foley Fertilizer Co., Foley, Ala., wants feed-grinding machinery. (See "Fertilizer Machinery, etc.")

Fertilizer Machinery, etc.—Foley Fertilizer Co., A. L. James, manager, Foley, Ala., will want fertilizer-mixing and feed-grinding machinery, with gasoline engine, within next 30 days.

Furniture.—See "Hotel Furnishings."

Flooring.—John Stone, Savannah, Ga., wants prices on parquet flooring.

Flour Mill.—Dr. B. O. Edwards, president Landis Milling Co., Landis, N. C., will soon be ready to receive bids on machinery for roller flour mill.

Furnishings (City Buildings).—City of Miami, Fla., in market for furnishings for new city building, courthouse, council chamber, jail and office; A. H. Adams, City Clerk.

Gasoline Engine.—See "Fertilizer Machinery, etc."

Glass-manufacturing Materials.—Bartlesville Bottle & Glass Co., Bartlesville, Okla., Jas. W. Lynch, 510 Shawnee Ave., secretary, wants ground limestone, glass cullet, soda ash, sand and coloring materials.

Grading.—Bob Parman, City Clerk, Oklahoma City, Okla., will receive bids until July 25 for grading certain streets; plans and specifications on file at office of City Clerk; bids must be accompanied by certified check for 3 per cent. of amount bid.

Grading.—Board of Mayor and Aldermen, Moss Point, Miss., will receive bids until August 1 for grading five miles (approximately) of city streets; certified check for 5 per cent. amount of bid, payable (without reserve) to city of Moss Point; plans and specifications at Mayor's office; C. M. Fairley, City Clerk.

Heating Plant.—J. E. Lee, Box 234, Dallas, Tex., wants bids on hot-water heating plant for two-story-and-basement residence, 47x39 feet.

Heating Plant.—H. M. Personett, Thurmond, W. Va., wants prices on heating plant for 42x30 foot lodge building.

Heating Plant.—J. E. Newman, East Rappahannock Ave., Norfolk, Va., wants prices on heating plant.

Heating Plant.—Proposals will be received by board of trustees of University of South Carolina at office of Governor, Columbia, S. C., until August 31 for first instalment of central heating plant, consisting of power-house, 125-horse-power H. R. T. boiler, power-house equipment, steam mains and conduit. Plans and specifications may be had on application to architects, Wilson & Sompayrac, 1302 Main St., Columbia, on deposit of \$10.

Heating Plants.—A. J. Beverett, Mayor, Midland City, Ala., wants information and prices on hot-air or steam-heating plants for \$6000 school building.

Holst.—V. H. Stillie, Sunset, La., wants second-hand 20-horse-power double-cylinder double-drum steam holst.

Hoisting Engine.—Henry Monk, Pensacola, Fla., will probably want double-cylinder double-drum hoisting engine.

Hotel Furnishings.—Rockville Hotel Corporation, J. M. Wolford, secretary, 615 14th St. N. W., Washington, D. C., wants furniture and furnishings for 30-room hotel.

Ice Machinery.—Wood Grocery Co., Selma, N. C., wants to correspond with manufacturers of ice machinery.

Iron and Steel.—Henry Monk, Pensacola, Fla., wants 50 tons iron and steel.

Jail Construction.—Henry Monk, Pensacola, Fla., wants bids from jail and cell constructors for extension of 16-foot cage for guardhouse.

Kiln.—Fairview Cement Co., Box 447, Fairview, Okla., wants rotary kiln; 100 tons capacity; 1500 degrees of heat; for gypsum rock; to remove all moisture from rock.

Laundry Machinery, etc.—J. C. White, Sylva, Ga., wants information on steam laundry and prices on machinery.

Levee Work.—Mississippi River Commission, U. S. Engineer Office, Room 29, Customhouse, Memphis, Tenn.—Proposals for about 226,000 cubic yards of levee work in Upper Yazoo levee district will be received until August 1. Information on application. M. L. Walker, Major, Engineers.

Levee Earthwork.—United States Engineer's Office, 3378 St. Charles Ave., New Orleans, La. Sealed proposals for constructing about 257,000 cubic yards of earthwork in Lower Tensas Levee District will be received until August 15, and then publicly opened; information on application; H. Burgess, Major, Engineers.

Lighting Plant.—E. J. & W. K. Dunne, Sumter, S. C., want prices on lighting plant.

Limestone.—See "Glass-manufacturing Materials."

Lighting Fixtures.—See "Building Materials, etc."

Locomotive.—Henry Monk, Pensacola, Fla., wants prices on 20 or 25-horse-power locomotive, new or second-hand boiler.

Lumber.—Harry A. Loche, 547 Drexel Bldg., Philadelphia, Pa., wants quotations on about five carloads of lumber—spruce, white pine, hemlock and oak; delivery daily for three to five years; specifications and other details furnished on application.

Lumber.—See "Building Materials."

Machine Tools.—Chas. A. Ryerson, 105 Howard St., Ridgeland, Tenn., wants to buy eight-foot cornice brake, 48-inch rolls, hand drill press, 40-inch square shear, etc., for blowpipe shop.

Marble.—See "Building Materials."

Masonry Work.—Sealed proposals will be received at office of Board of Sinking Fund Commissioners, Frankfort, Ky., up to August 2 for construction of masonry approach to new State Capitol; branches of work included are excavation, concrete (not reinforced), brick and concrete walks, cut stone and storm water drainage. Plans and specifications may be had by applying to architects, Frank M. Andrews & Co., 22d floor Metropolitan Tower, New York.

Mining Machinery.—W. A. Wickliffe, Greenville, Ky., wants prices on mining machinery.

Mining Machinery.—J. M. Short, manager, R. F. D. 3, Galena, Kans., will open bids after September 1 on boiler, crushing machinery and electrical machinery for plant of Sirling Bull Lead & Zinc Mining Co., Joplin, Mo.

Metal Ceiling.—John Stone, Savannah, Ga., wants prices on steel ceiling.

Metal Ceiling.—E. J. & W. K. Dunne, Sumter, S. C., want prices on metal ceiling.

Office Supplies.—See "Furnishings."

Ornamental Iron.—John Stone, Savannah, Ga., wants prices on ornamental iron.

Overalls Machinery, etc.—L. L. Wagon, care of Union Grocery Co., Main and Bachelor Sts., Union, S. C., wants information on establishment and operation of overalls factory; also prices on machinery.

Painting.—J. E. Newman, East Rappahannock Ave., Norfolk, Va., wants prices on painting.

Paving.—Monongalia County Road Commissioners, Morgantown, W. Va., will let contract in about 30 days for construction of 300 linear feet of brick pavement, 26 feet wide, with concrete curb and sidewalks and necessary sewers; Robert D. Hennen, road engineer, Morgantown.

Paving.—Palm Beach County Commissioners, W. H. DaCamara, chairman, West Palm Beach, Fla., will open bids July 28 for constructing cement walk around east and north sides of courthouse and from sidewalk to steps on said sides; plans and specifications on file in office of clerk of Circuit Court, Fred E. Fenne.

Paving.—Bids, to be filed with clerk of Board of Mayor and Aldermen, Leland, Miss., will be received until August 2 for construction of concrete sidewalks; plans and specifications and instructions to bidders on file with clerk; R. W. Garrison, Mayor.

Paving Blocks.—Baltimore (Md.) Board of Awards, care J. S. Well Thomas, City Register, City Hall, will open bids July 27 for long leaf yellow pine paving blocks delivered f. o. b. Baltimore; specifications and blank proposal forms can be had on application at office of B. T. Fendall, City Engineer.

Paving.—Office of Constructing Quartermaster, Lieut. Edwin F. Barlow, Fort Morgan.—Sealed proposals in triplicate will be received until August 5 for construction of brick-paved road and cement walks around barracks, mess hall and lavatory; plans, specifications, blank proposals and information furnished on application; a deposit of \$5 required for drawings and specifications; deposit returned to bidder on return of drawings. Plans and specifications may be seen at this office. United States reserves usual rights.

Paving.—J. H. Hicks, Mayor, Clarksville, Ga., will receive bids until August 5 for approximately 6000 linear feet of curb and gutter; 8000 square yards macadam paving, and 10000 square yards brick or concrete sidewalks; plans and specifications on file at office of Mayor; general information regarding work may be obtained upon application to engineer, H. S. Jaudon, P. O. Box No. 111, Gainesville, Ga.; certified check \$500 must accompany each bid.

Paving.—Mayor and Board of Aldermen, Gulfport, Miss., will receive bids until August 2 on construction of approximately 12,000 square yards cement sidewalks; specifications, etc., obtainable from Holbert D. Shaw, City Engineer.

Piling.—Henry Monk, Pensacola, Fla., wants 50 tons cast-iron piling.

Peanut Machinery.—Jn. Brutt Davy, Government agronomist and botanist, Box 431, Pretoria, British South Africa, wants catalogues of peanut machinery for harvesting, threshing, winnowing, shelling and grading.

Pump.—See "Water-works."

Pump.—Department of Justice, Office of Superintendent of Prisons, Washington, D. C.—Proposals will be received until July 29 for furnishing and delivering at United States penitentiary, Atlanta Ga., boiler-feed pump, in accordance with specifications, copies of which, together with further information, may be had upon application at above office. R. V. LaDow, superintendent of prisons, Washington, D. C.

Pump.—Hinton Water, Light & Supply Co., Hinton, W. Va., wants steam-driven pump for water-works; operating conditions as follows: Steam pressure, 100 pounds; water pressure from reservoir, 125 to 150 pounds; distance from pumping station to reservoir, 1800 feet; diameter of pipe from pumps to reservoir, 10 inches; distance from pumping station to intake, 400 feet; diameter of suction line, 8 inches; lift from intake to pump, about 12 feet; required capacity of pump, 60,000 gallons per hour.

Pump.—Henry Monk, Pensacola, Fla., wants price on duplex double-acting pump, 6x3x6.

Pumps.—W. A. Wickliffe, Greenville, Ky., wants prices on pumps.

Rails.—W. A. Wickliffe, Greenville, Ky., wants prices on steel rails.

Rails.—J. S. Schofield's Sons Company, Macon, Ga., wants 3000 to 5000 feet 12-pound T rail; delivered Macon.

Road Construction.—Bids will be received at Clerk's office, Wytheville, Va., until August 2 for construction of 3 1/4 miles of macadam road from end of present contract east of Lynchburg turnpike from Wytheville; plans and specifications on file in office of Clerk, Wytheville, and of P. St. J. Wilson, State Highway Commissioner, Richmond, Va.; specifications furnished on application to office of State Highway Commissioner; certified check, \$250; engineer will be at Wytheville on July 26 to give information to contractors.

Road Construction.—D. M. Miles, County Supervisor, and D. P. L. Martin, Commissioner, Spartanburg, S. C., will award following road contracts on July 27: Two miles of road from Choice Place toward Boiling Springs, two miles from city limits along Howard Gap Rd., and two miles on New Cut Rd. leading toward County Farm from Howard Gap Rd.; roads are to be 30 feet wide with not more than 5 per cent. grade; specifications will be fully explained on day of letting.

Road Construction.—Constructing Quartermaster, Fort Howard, Md., will receive bids until August 15 for constructing macadam roads, macadam resurfacing roads, concrete walks and cross-walks; deposit of \$5 required to secure plans; information on application.

Road Construction.—Morgan County Commissioners, Decatur, Ala., will receive bids until August 9 for grading, draining and macadamizing Decatur-Danville Rd., 5 1/2 miles; grading, draining and macadamizing Falkville Rd., 1 1/2 miles; grading, draining and macadamizing Lacey Springs Rd., 3 miles; grading and draining county road No. 2, 1.5 miles; specifications on file at office of County Engineer, Box 173, New Decatur, Ala.

Road Construction.—State Roads Commission, John M. Tucker, chairman, Union Trust Bldg., Baltimore, Md., will receive bids until July 27 for construction of three miles of stone macadam road in Cecil county between Elkton and Singler; bids to be made on blank form contained in book of specifications furnished by commission upon application and payment of \$2 for each section; blueprints furnished at rate of 25 cents for each half-mile section; bids to be accompanied by certified check for \$500.

Road Machinery.—City of Wiggins, Miss., will need machinery for constructing streets.

Roller Partition.—Hinton Booth, Statesboro, Ga., wants prices on roller partition for Sunday-school room; space about 12 feet high by 30 feet long.

Sand.—See "Glass-manufacturing Materials."

Safe, etc.—Missouri Miners' Casualty Co., Joplin, Mo., wants prices on safe, vault and other bank fixtures.

Sawmill.—J. P. Clevenger, Clevenger, Tex., will open bids within few days for sawmill, complete, including 8-inch gun and steam nigger, edgers, trimmers, automatic saws, two planer machines, resaw, bending and laminating machines, blowers, etc.; also two engines. (See "Engines.")

School Furniture.—School Board, Lawrence T. Royster, M.D., chairman, Norfolk, Va., will receive proposals until July 27 on following furniture for new school, to be delivered by September 15: (1) 1000 seats or chairs for auditorium; 30 inches space allowed for seats; bidders to submit plans for seating, also samples. (2) About 1000 single non-adjustable table desks for classrooms; samples required. (3) About 30 single typewriter desks; photograph accepted. (4) About 40 bookkeepers' desks; photograph accepted. (5) About 30 desks for teachers; photograph accepted. Proposals for Nos. 1 and 2 will include placing in position in auditorium or classrooms; Nos. 3, 4 and 5 to be f. o. b. Norfolk; committee will meet at 9 A. M. at offices of School Board, corner Granby St. and City Hall Ave., where furniture may be sent; birch-wood furniture preferred; other wood may be accepted.

School Furniture.—E. M. Cook, Hazlehurst, Miss., wants prices on school furniture.

Seating.—See "School Furniture."

Seating.—See "Theater Furnishings, etc."

Sewers.—See "Paving."

Sewer Construction.—W. F. Divine, City Clerk, St. Petersburg, Fla., will receive bids until August 11 for laying 1800 linear feet of 16-inch cast-iron flange outlet sewer pipe into Tampa Bay; bids will also be received for laying and furnishing all material except pipe, which city will furnish, f. o. b. St. Petersburg; profile and specifications can be had at office of M. W. Spencer, City Engineer.

Shafting.—See "Belting and Shafting."

Shoemaking Machinery, etc.—Joseph Spiero, 17 Battery Pl., New York, wants prices on

shoemaker's specialties, including small machines, tools, shoe lasts of wood and aluminum; for importation to Germany; wants addresses of manufacturers.

Skylights.—E. J. & W. K. Dunne, Sumter, S. C., want prices on ventilating skylights. Skylights.—See "Building Materials, etc."

Stateworking Machinery.—J. H. Beckley, Monroe, N. C., wants machinery, including saw, for working slate rock.

Stable Fittings and Equipment.—Arthur Cowdill, Hibbs Bldg., 723 15th St. N. W., Washington, D. C., wants 140 iron stall partition guards; 28 iron stall door guards; 112 corner-feed troughs; considerable miscellaneous stable fittings and equipment.

Steel.—See "Iron and Steel."

Stamped & et-metal Products.—Southern States Steel Co., 1411 Praetorian Bldg., Dallas, Tex., wants to correspond with manufacturers of stamped sheet-metal articles.

Stamped-metal Novelties.—Leon C. Steele, 114 Granby St., Norfolk, Va., wants addresses of manufacturers of stamped-metal novelties.

Steamboat.—J. I. Hazard, Georgetown, S. C., wants propeller steamboat; about 90 to 100 feet length over all; drawing not over five feet of water loaded; must be fitted for saloon cabin passenger service on upper deck, freight on main deck, and able to make 10 miles per hour; give specifications, age, price, etc.

Steel Bars.—E. Parke Lindsay, 607 Middle St., Portsmouth, Va., wants addresses of manufacturers of or dealers in galvanized-steel bars for protecting concrete curbing.

Stone.—Blackshear Manufacturing Co., Blackshear, Ga., wants prices on crushed stone for concrete.

Store Fixtures.—E. J. & W. K. Dunne, Sumter, S. C., want prices on drug-store fixtures.

Structural Steel and Iron.—See "Building Materials."

Structural Iron.—Arthur Cowdill, Hibbs Bldg., 723 15th St. N. W., Washington, D. C., wants light structural iron work.

Tan Bark.—Arthur Cowdill, Hibbs Bldg., 723 15th St. N. W., Washington, D. C., wants four cars tan bark for ring floor.

Theater Furnishings, etc.—A. Ten Eyck Barown, Forsyth Bldg., Atlanta, Ga., wants proposals on opera chairs, scenery decorations, etc., for proposed \$35,000 vaudeville theater at Chattanooga, Tenn.

Timber Land.—M. P. Bonifant, Powhatan, Va., wants large tract of fine quality hardwood or pine timber.

Tipples.—W. A. Wickliffe, Greenville, Ky., wants prices on tipples for coal mine.

Valve Machinery.—Bids will be received at office of General Purchasing Officer, Isthmian Canal Commission, Washington, D. C., until September 16 for furnishing and erecting machinery to operate Stoney Gate valves for controlling main culverts and machinery to operate cylindrical valves for controlling lateral culverts of Upper Lock at Gatun and Pedro Miguel Lock. Blanks and general information relating to circular No. 596 may be obtained at above office or office of assistant purchasing agents, 24 State St., New York; 55 National Realty Bldg., New Orleans; 1086 North Point St., San Francisco, Cal.; also from U. S. Engineer office in following cities: Seattle, Wash.; Los Angeles, Cal.; Baltimore, Philadelphia, Pittsburgh, Boston, Buffalo, Cleveland, Cincinnati, St. Paul, Detroit, Milwaukee, Chicago, St. Louis, Chattanooga, Louisville, Mobile and Galveston; Commercial Club, Kansas City; Chamber of Commerce, Quincy, Ill., and Chamber of Commerce and Board of Trade, Tacoma, Wash.; F. C. Boggs, Captain, Corps of Engineers, U. S. A., General Purchasing Officer.

Vault Door, etc.—E. J. & W. K. Dunne, Sumter, S. C., want prices on vault door and other bank fixtures.

Water Meters and Steel Billets.—Bids will be received at office of General Purchasing Officer, Isthmian Canal Commission, Washington, D. C., until August 15 for furnishing water meters and steel billets, included in annual estimate for period ending June 30, 1911. Blank and general information relating to circular No. 597 may be obtained at above office or offices of assistant purchasing agents, 24 State St., New York; 55 National Realty Bldg., New Orleans; 1086 North Point St., San Francisco, Cal.; also from U. S. Engineer office in following cities: Seattle, Wash.; Los Angeles, Cal.; Baltimore, Philadelphia, Pittsburgh, Boston, Buffalo, Cleveland, Cincinnati, St. Paul, Detroit, Milwaukee, Chicago, St. Louis, Chattanooga, Louisville, Mobile and Galveston; Commercial Club, Kansas City; Chamber of Commerce, Quincy, Ill., and Chamber of Commerce and Board of Trade, Tacoma, Wash.; F. C. Boggs, Captain, Corps of Engineers, U. S. A., General Purchasing Officer.

Water-works.—Dr. A. S. Priddy, executive officer, Virginia State Epileptic Colony, Lynchburg, Va., will receive bids until July 25 on construction of pipe line; cast-iron four-inch main, 5000 feet. (See "Water-works," "Va., Lynchburg.")

Water-works Equipment, etc.—Johnson City, Tenn., E. E. Ellsworth, treasurer, wants prices on galvanized water pipe, wrought-iron corporation cocks, cut-offs, valve boxes, etc., for water-works.

INDUSTRIAL NEWS OF INTEREST

Secures Important Contract.

The Carolina Electrical Co., 110 Fayetteville St., Raleigh, N. C., has contract to supply electrical equipment for the Nurses' Home and Women's Bldg., Watts Hospital, Durham, N. C. This equipment includes a special electric-light signal system to be used in the place of bells. The Carolina Electrical Co. has also an order for material for an extension of the Goldsboro trolley system.

A Consulting Geological Engineer.

The office of Frederick G. Clapp, consulting geological engineer, situated at 331 Fourth Ave., Pittsburgh, Pa., was established about two years ago. During this time its services have been employed by oil, gas and mining companies, civil engineers, hydro-electric companies and others. The services of Mr. Clapp and his assistants are available for mere consultation or for contracts covering extended periods of time. Field examinations of mineral properties in the South are made a specialty.

Wood and Metal Preservative Paints.

The Rabok Manufacturing Co., St. Louis, Mo., manufacturer of wood and metal preservative paints, has closed a contract with the Rabok Manufacturing Co. of England, which is preparing to erect a factory at Sheffield, England, for the production of Rabok specialties under exclusive manufacturing rights from the American company. The English company will manufacture and sell in Great Britain and the colonies exclusive of Canada. F. H. Milnes is president of the new company.

The Chambers-Morris Company.

The Chambers-Morris Company, civil engineer, 215 Godchaux Bldg., New Orleans, announces that it has accepted the agency of the Trussed Concrete Steel Co. of Detroit, and is doing its engineering work and handling the entire line of Kahn system reinforcements, waterproofing, steel sash, concrete specialties, etc. It is also handling the Blaw collapsible steel centering, asbestos protected metal and other supplies. The company states that its facilities enables it to engage in any civil engineering work.

At Salt Lake City Also.

In connection with the announcement last week in which it was stated that the Mine & Smelter Supply Co. maintains large offices and warehouses at Denver, El Paso and Mexico City, with executive offices at 42 Broadway, New York, it is also announced that this company maintains large offices and warehouses at Salt Lake City. The Mine & Smelter Supply Co. has recently accepted the agency for the entire Western territory of the United States of the well-known line of pumps made by the Epping-Carpenter Company, Pittsburgh, and compressors made by the Bury Compressor Co. of Erie, Pa.

Automatic Car Coupler.

A car coupler operating automatically has been invented by John E. Yeiser of Austin, Tex., who has been developing the device during a period of about 15 years. This coupler opens and closes and locks with a key, which prevents cars uncoupling by accident, while the improved uncoupling lever unlocks the cars, opens and closes the coupler. It is not necessary for switchmen and brakemen to go between cars to couple or uncouple, the device operating on the first impact and leaving no slack. The coupler, it is said, has been endorsed by a number of railroads handling cars in Texas.

Will Be Sole Selling Agent.

The Penn Allen (Pa.) Cement Co. has reorganized with William E. Erdell president and general manager, and has resumed operations at its plant at Bath, Pa. The plant has a capacity of about 75,000 barrels of cement per month, and the William G. Hartman Cement Co., Real Estate Trust Bldg., Philadelphia, has been appointed sole selling agent. Mr. William G. Hartman of the Hartman company has been associated with the sale of American Portland cement since

the establishment of his company nearly 30 years ago.

Order for Westinghouse Equipment.

Through its Atlanta office at the Chandler Bldg., R. R. Laxton, district manager, the Westinghouse Machine Co., Pittsburgh, Pa., has received an order from the Central of Georgia Railway for a 750-horse-power steam turbine, with Westinghouse-LeBlanc condensing equipment, for railroad shops at Savannah. The purchase price was \$20,000 and delivery is to be made in the fall.

Moves Into New Building.

In order to provide more and better facilities for supplying its growing trade for electrical supplies and equipment, the Baltimore (Md.) Electrical Supply Co. has recently moved into its new building at 308 Calvert St. The building is modern in design and construction, four stories high, and occupies a lot 100x30 feet. It is conveniently arranged to meet the special requirements of the company and affords excellent freight facilities. The Baltimore Electrical Supply Co. has a large Southern trade and regards this territory as very promising for its activities.

Recent Orders for Berger Products.

Among well-known manufacturers of metal products for various purposes is the Berger Manufacturing Co., main office and plant, Canton, O. This company maintains a Southern sales office in the Rhodes Bldg., Atlanta, and through this office has recently received a number of important orders. These include sidewalk lights for the Masonic Temple at Greenville, S. C., and for the Inman Bldg. in Atlanta. It has also sold 100,000 feet of Berger's prong-lock metal studs for the Seminole Hotel, Jacksonville, Fla., and metal studs and metal laths for an eight-story office building in Oklahoma City. The last-mentioned purchase was made by Pearson & Hancock of Atlanta, who were awarded the contract for plastering.

Crocker-Wheeler Orders.

Among orders recently looked by the Crocker-Wheeler Company, manufacturer and electrical engineer, Amper, N. J., are the following: Two 1000-kilowatt engine-type generators for the Republic Iron & Steel Co., Hazleton plant; one 500-kilowatt engine-type generator for A. M. Byers Company, Pittsburgh, Pa.; one 300-kilowatt engine-type generator for the H. Lauter Company of Indianapolis; one 175-horse-power auxiliary pole motor for the Orford Copper Co. of New Jersey; one 1000 K. V. A. engine-type A. C. generator and one 150 K. V. A. engine-type generator for the Big River Lumber Co. of Saskatchewan, Canada; one 150 K. V. A. engine-type A. C. generator with exciter for the town of Julesburg, Col.; one 300 K. V. A. belt-type A. C. generator with exciter for the York Card & Paper Co. of Pennsylvania; two 500-kilowatt synchronous motor generator sets for the new Gary plant of the American Sheet & Tinplate Co.

A Remarkable Stevens Showing.

At the forty-first annual tournament of the Southern New England Schuetzen Bund at New Britain (July 4, 5 and 6), Stevens rifles and telescopes made a remarkable showing. More than 80 shooters of national reputation competed. The leading event, the target-of-honor match, was won by F. C. Ross of Springfield. First prize on German ring target was won by J. Hunziger of Hartford, Conn., who scored 216 points. Mr. Hunziger scored 75 points out of a possible 75 on one ticket, which is a perfect score and said to be the highest obtained at these tournaments in 41 years. T. R. Geisel was second and F. C. Ross third. Mr. Hunziger and Mr. Geisel used Stevens-Pope rifles equipped with ordinary sights, and Mr. Ross used a Stevens-Pope rifle equipped with Stevens telescope. The bull's-eye target was won by Mr. Hunziger, with W. S. Gibson of Springfield, Mass., second, and H. N. Wood of Springfield, third. Mr. Gibson and Mr. Wood used Stevens telescopes. F. L. Smith won first prize on the muzzle-rest target, scoring 146 points out of 150, while W. D. Palmer and F.

C. Ross tied for second place, each scoring 143. These three contestants used Stevens-Pope rifles equipped with Stevens telescopes. Mrs. Edward Remkus won the ladies' German ring target, using a Stevens-Pope rifle equipped with a Stevens telescope. It is stated that no telescopes but those of Stevens were used, except on the honor target, in which event the contestants were obliged to use ordinary sights only. The Stevens-Pope rifles and telescopes are manufactured by the J. Stevens Arms & Tool Co., Chicopee Falls, Mass.

TRADE LITERATURE.

The Hayward Buckets.

Presenting illustrations and descriptive data of Hayward digging buckets is a card being mailed by the Hayward Company, 50 Church St., New York. This company manufactures buckets for various services. Its products including orange-peel buckets, clam-shell buckets and buckets of special design.

The Edison Aggregate.

Published in the interest of concrete construction is the Edison Aggregate, a monthly publication. This magazine has been issued for June, and presents descriptive data, together with interesting illustrations of important construction work in which Edison Portland cement has been employed. Edison cement is manufactured by the Edison Portland Cement Co. of New Village, N. J.

The Universal Bulletin.

Monthly bulletin No. 74, issued by the Universal Portland Cement Co. of Chicago and Pittsburg, is being distributed for July. This publication contains some timely information regarding Portland cement, and on its front page presents an interesting photograph of the Blackstone Hotel of Chicago. In the construction of which a large amount of Universal Portland cement was used.

The Indicator for June.

The Indicator, a publication by the Otis Elevator Co. of New York and other cities, has been issued for June. This publication is designed to give the coworkers of the Otis company a more comprehensive knowledge of the elevator industry and to encourage individual effort. It presents a photograph and description of the Blackstone Hotel of Chicago, which is equipped with Otis elevators.

"Pioneer" Asphalts.

Literature relating to the use of "Pioneer" asphalt for good roads and other purposes is being distributed by the American Asphalt & Rubber Co., 690-614 Harvester Bldg., Chicago. This product is manufactured by the company referred to and is claimed to make roads dustless, binding the wearing surface and making a firm, elastic and waterproof roadway. Its use for roads is described and illustrated in a pamphlet which the company has issued, while another pamphlet illustrates and describes the construction of the water-works of Monterey, Mexico, in which "Pioneer" asphaltum was extensively used. The company has also issued a folder presenting a brief description of the development and usage of wooden-stave pipe, with a photograph showing a wooden-stave pipe line in process of construction.

Road Rollers and Contractor Engines

Announcing that it has always been its policy to never attempt to lessen construction cost of its machinery by lowering the standard of efficiency and durability, the Huber Manufacturing Co., Marion, O., states that its equipment in use for many years may still be found at work in all parts of the country. Among the Huber products are road rollers and contractor engines for all kinds of contract work, plowing, hauling, etc. These are claimed to be constructed as well as it is possible, the company realizing that the class of work for which they have been designed offers some of the severest tests to which machinery of this character is subjected. The company has issued a catalogue illustrating and describing the details of the machine's manufacture and adaptability for the work intended.

Voltz Metal Sash Bars.

A prominent Southern sash manufacturer of metal sash bars is the Voltz Manufacturing Co. of St. Joseph, Mo. An interesting incident in connection with the product of this company is the claim that two insurance companies have decided that plate glass set in these bars may pay only the regular premium for insurance. This judgment, it is said, was fully justified recently during a windstorm in a South Dakota town. A building in the town containing 115 lights of plate glass, 114 of which were set in Voltz

sash bars and the remaining one in ordinary wood sash, had only one pane blown out, and this was the one set in the wooden bar, the others remaining intact. The Voltz company has issued a pamphlet illustrating and describing its sash bars in connection with this and other buildings in which they have been subjected to severe tests.

Manufacturing Paint Specialties.

For the purpose of manufacturing only paint specialties for railroad use exclusively, the St. Louis Surfer & Paint Co. incorporated in 1903 with W. S. Avis president, H. C. Avis secretary and treasurer and C. E. Koons general manager. With a practical knowledge of the needs of railroads the company's trade has expanded so extensively that from two small rooms it has enlarged its facilities to 13 floors stocked with material and machinery for the manufacture of its products. The main specialties of the company are claimed to successfully meet the demand for durability, both for freight and passenger cars, structural steel bridge work and other railroad needs. Among the products of this company, which are exclusively railroad paints, are coach and car (metal) surfacer, canvas preserver, canvas roof paint, floor paint, cab enamel, cupoose enamel, locomotive enamel, truck enamel, "metal steel" paint, freight-car paints, etc.

Hemming Insulation.

Since the earliest use of electrical equipment a constant search has been maintained for satisfactory insulating materials. Natural products, such as wood and mica, and innumerable manufactured materials have been introduced. Some of them give excellent results, yet the continued use of the older and simpler forms of insulation has encouraged further research and the belief that improvements may be made which will meet with recognition from users of such materials. An insulating material which is claimed to meet all requirements as nearly as possible is known as "Hemit." This product was first manufactured in Germany under the name of "Gummon," but the United States and Canadian patents, together with certain improvements, the result, it is said, of researches made by Emil Hemming, are now the property of the Hemming Manufacturing Co., 2 Rector St., New York. This company has a specially designed plant at Gardfield, N. J., for the manufacture of the product, and has recently issued a pamphlet describing it and illustrating its application.

FINANCIAL NEWS

The MANUFACTURERS' RECORD invites information about Southern financial matters, items of news about new institutions, dividends declared, securities to be issued, openings for new banks, and general discussions of financial subjects bearing upon Southern matters.

Review of the Baltimore Market.

OFFICE MANUFACTURERS' RECORD.

Baltimore, Md., July 20.

In the Baltimore stock market during the past week there was a little interest in United Railways securities on account of rumors of a deal for control. In the trading United Railways common sold from 14 to 14½; do. trust certificates from 14½ to 15½; with last sale at 15½; do. incomes from 58 to 59½; with last sale at 58½; do. funding 5s from 81½ to 84; with last sale at 83; do. funding scrip from 81½ to 83; do. 4s from 83½ to 84½; with last sale at 84½; Consolidated Gas, Electric Light & Power preferred, 90; do. notes, 97½ to 97½; Consolidated Gas 5s, 107½ to 108; Seaboard 4s, stamped, 83 to 82½; do. three-year 5s, 99½; do. 10-year 5s, 99½; Consolidated Cotton Duck preferred, 20; Mt. Vernon-Woodberry Cotton Duck 5s, 68½ to 72; G. B. S. Brewing 1sts, 41½ to 42.

Bank stock sold as follows: Mechanics', 27; Exchange, 156; Union, 118; Howard, 13½ to 13½; Merchants', 171; Western, 36½; Drovers and Mechanics', 228.

Mercantile Trust sold from 137 to 139½; Baltimore Trust, 167½; United States Fidelity, 135; American Bonding, 70½; Maryland Casualty, 90.

Other securities were traded in thus: Georgia, Carolina & Northern 5s, 103½; Northern Central Railway stock, 127½ to 126; with last sale at 126½; Wilmington & Weldon 5s, 108½; Maryland & Pennsylvania common, 20 to 24½; Maryland Electric 5s, 96½ to 96; Baltimore City 3½s, 1930, 92½ to 92½; Norfolk & Portsmouth Traction 5s, 82½ to 82; West Virginia Central 6s, 100½; Anacostia & Potomac 5s, 100 to 100½; Georgia & Alabama Consolidated 5s, 102½; Atlantic

Coast Line of Connecticut, 5-20s, 89; City & Suburban (Washington) 5s, 101½; Consolidation Coal, 111; Coal & Iron Railway 5s, 100; Charleston & Western Carolina 5s, 103; Jamison Coal & Coke, George's Creek 5s, 90 to 89½; Oregon Water-Power & Railway 1st 6s, 104; Carolina Central 4s, 91; Savannah, Florida & Western 6s, 121½; Houston Oil preferred, 35; Richmond & Danville Gold 6s, 106; Baltimore, Sparrows Point & Chesapeake 4½s, 92½; Atlanta Consolidated Street Railway 5s, 104½; Baltimore City 4s, 1957, 100; Fairmont & Clarksburg Traction 5s, 95; German Fire Insurance, 17; Consolidation Coal refunding 4½s, 94; Merchants & Miners' Transportation Co., voting trust, 71½; Maryland & Pennsylvania incomes, 60; Florida Southern 4s, 96.

SECURITIES AT BALTIMORE.

Last Quotations for the Week Ended July 20, 1910.

Railroad Stocks.	Par.	Bid.	Asked.
Atlanta & Charlotte.....	100	100	100
Atlantic Coast Line.....	100	112	113
Atlantic Coast of Conn.....	100	219½	220
Georgia Sou. & Fla. 1st Pfd.....	100	92	92
Georgia Sou. & Fla. 2d Pfd.....	100	75	75
Maryland & Pennsylvania.....	100	22½	24½
Seaboard Company Common.....	100	19	21
Seaboard Company 2d Pfd.....	100	40	42
United Ry. & Elec. Co.....	50	14½	14½

Bank Stocks.	Par.	Bid.	Asked.
Citizens' National Bank.....	10	37	37
Drovers & Mech. Nat. Bank.....	100	223	231
Farmers & Mer. Nat. Bank.....	40	49	49
First National Bank.....	20	145½	145½
Maryland National Bank.....	20	22½	22½
Merchants' National Bank.....	100	172½	175
Bank of Baltimore.....	100	118	118
Exchange National Bank.....	100	155	155
Howard National Bank.....	10	13½	13½
Marine National Bank.....	30	42	43
Mechanics' National Bank.....	10	22½	22½
Union National Bank.....	100	117	117
Second National Bank.....	100	191	201
Third National Bank.....	100	120	120
Western National Bank.....	20	36	37

Trust, Fidelity and Casualty Stocks.	Par.	Bid.	Asked.
American Bonding.....	25	70½	70½
Baltimore Trust.....	100	166	167½
Colonial Trust.....	50	25½	25½
Continental Trust.....	100	265	265
Fidelity & Deposit.....	50	140	146
Maryland Trust.....	100	50	70
Maryland Trust Pfd.....	100	96	107
Maryland Casualty.....	25	130½	141
Mercantile Trust & Fidelity.....	100	131	131

Miscellaneous Stocks.	Par.	Bid.	Asked.
Con. Cotton Duck Pfd.....	50	20	20
Con. Gas, Elec. Lt. & P. Com.....	100	59	59
Con. Gas, Elec. Lt. & P. Pfd.....	100	87	87
Consolidation Coal.....	100	110	111
G. B. S. Brewing Co.....	100	1	3
Georges Creek Coal.....	100	13½	13½
Mer. & Miners' Trans. Co. V. T. 100	71	76	76

Railroad Bonds.	Par.	Bid.	Asked.
Atlanta & Birmingham 4s.....	100	92½	92½
Atlantic Coast 1st 4s.....	100	95	95
Atlantic Coast Conv. Deben. 4s.....	100	96	96½
Atlan. Coast (Conn.) 4s, Cfs.....	100	88	88
Atlan. Coast (Conn.) 4s, Cfs.....	100	88½	90
Balto. & Annapolis S. L. 5s.....	100	91	91
Balto. & Harrisburg 5s.....	100	104	104
Balto. & Harrisburg Ext. 5s.....	100	102	102
Carolina Central 4s.....	100	91	91
Charleston & West. Car. 5s.....	100	103	104
Coal & Iron Railway 5s.....	100	99	99
Col. & Green. 1st 6s.....	100	106	106
Florida Southern 4s.....	100	90	90½
Georgia & Alabama 5s.....	100	101½	102½
Georgia, Car. & North. 1st 5s.....	100	103½	104½
Georgia Pacific 1st 6s.....	100	109	112
Georgia South. & Fla. 1st 5s.....	100	106	107
Maryland & Penna. 4s.....	100	89	89
Maryland & Penna. Income 4s.....	100	59	61
Piedmont & Cumberland 1st 5s.....	100	99½	100
Potomac Valley 1st 5s.....	100	103	108
Richmond & Danville 6s.....	100	105½	106½
Savannah, Fla. & West. 6s.....	100	121½	121½
Seaboard Air Line 4s.....	100	82½	83½
Seaboard 4s, Stamped.....	100	72	73
Seaboard Adjustment 5s.....	100	99	99½
Seaboard, 10-year, 5s.....	100	99½	99½
Seaboard, 3-year, 5s.....	100	99½	99½
Seaboard & Roanoke 5s.....	100	103	105
Suffolk & Carolina 5s.....	100	100	100
Virginia Midland 3d 6s.....	100	107	109
Virginia Midland 4th 5s.....	100	104	104
Virginia Midland 5th 5s.....	100	106	106
Virginia Midland 6th 5s.....	100	106	106
Washington & Vandemere 4½s.....	100	97	97
Western Maryland 4s.....	100	83½	84
West Va. Central 1st 5s.....	100	100½	100½
Wm. Col. & Aug. 6s.....	100	96	96
Wilmington & Weldon 4s.....	100	108½	108½
Wilmington & Weldon 5s.....	100	97	97

Street Railway Bonds.	Par.	Bid.	Asked.
Anacostia & Potomac 5s.....	100	101	101
Augusta Ry. & Elec. Co. 5s.....	100	102½	102½
Balto. Catons. & E. M. 5s.....	100	102	101
Balto. City Pass. 5s.....	100	97½	100
Balto. Sp. Pt. & C. 4½s.....	100	92½	92½
Balto. Trac. (N. B. 1st) 5s.....	100	111½	111½
Central Ry. (Balto.) Ext. 5s.....	100	106	106
Central Ry. (Balto.) Ext. 5s.....	100	106	106
Charleston City Ry. 5s.....	100	102½	102½
Charleston Con. Elec. 5s.....	100	93	93
City & Suburban 5s (Balto.).....	100	106½	106½
City & Suburban 5s (Wash.).....	100	101½	101½
Fairmont & Clarksburg Trac. 5s.....	100	95	96
Knoxville Traction 5s.....	100	102	102
Lake Roland Elevated 5s.....	100	110½	110½
Mass. Railway & Light 5s.....	100	95	95½
Maryland Electric Railway 5s.....	100	93	93½
Memphis Street Railway 5s.....	100	98	99½
Metropolitan 5s (Wash.).....	100	107	110
Newport News & Old Point 5s.....	100	95	95
Norfolk & Portsmouth Traction 5s.....	100	82	83
Richmond Traction 5s.....	100	104½	105½
United Railways 1st 4s.....	100	84½	84½
United Railways Inc. 4s.....	100	58	58½
United Railways Funding 5s.....	100	83	83

Miscellaneous Bonds.	Par.	Bid.	Asked.
Atlanta Gas 1st 5s.....	100	102	103
Baltimore Brick 5s.....	100	92½	92½

Baltimore Electric 5s, Stp.....	83½	89
Consolidated Gas 5s.....	107½	108
Consolidated Power Notes.....	97½	97½
Consolidation Coal Refdg. 4½s.....	94½	94½
Con. Gas, Elec. Lt. & P. 4½s.....	87	89
G. B. S. Brewing 1st 4s.....	41½	42
Maryland Telephone 5s.....	99½	99½
Mt. Vernon-Woodberry Cot. Duck 5s.....	71½	72
United Elec. Lt. & P. 4½s.....	87	89

SOUTHERN COTTON-MILL STOCKS.

Quotations Furnished by William S. Glenn, Broker, Spartanburg, S. C., for Week Ending July 18.

	Bid.	Asked.
Abbeville Cotton Mills (S. C.).....	95	95
Alken Mfg. Co. (S. C.).....	90	90
American Spinning Co. (S. C.).....	160	160
Anderson Cotton Mills (S. C.).....	53	55
Arcadia Mills (S. C.).....	100	100
Arkwright Cotton Mills (S. C.).....	100	103
Augusta Factory (Ga.).....	60	65
Avondale Mills (Ala.).....	116	116
Beltone Mills (S. C.).....	137	140
Brandon Mills (S. C.).....	97	100
Cannon Mfg. Co. (N. C.).....	135	135
Cabarrus Cotton Mills (N. C.).....	120	135
Chadwick Mfg. Co. (N. C.) Pfd.....	100	100
Chiquola Mfg. Co. (S. C.).....	180	180
Clifton Mfg. Co. (S. C.).....	105	105
Clinton Cotton Mills (S. C.).....	120	130
Columbus Mfg. Co. (Ga.).....	93	95
Courtenay Mfg. Co. (S. C.).....	100	100
Dalton Mfg. Co. (Ala.).....	99	99
Darlington Mfg. Co. (S. C.).....	80	85
D. E. Converse Co. (S. C.).....	100	100
Drayton Mills (S. C.).....	95	105
Eagle & Phenix Mills (Ga.).....	117	117
Easley Cotton Mills (S. C.).....	175	185
Enoree Mfg. Co. (S. C.).....	57	60
Enoree Mfg. Co. (S. C.) Pfd.....	95	100
Enterprise Mfg. Co. (Ga.).....	80	85
Exposition Cotton Mills (Ga.).....	200	200
Galaxy Mfg. Co. (S. C.).....	80	85
Gainesville Cotton Mills (Ga.).....	75	80
Glenwood Cotton Mills (S. C.).....	150	150
Gluck Mills (S. C.).....	100	102
Granby Cot. Mills (S. C.) 1st Pfd.....	35	45
Graniteville Mfg. Co. (S. C.).....	160	165
Greenwood Cotton Mills (S. C.).....	58	61
Grendel Mills (S. C.).....	114	117
Hartsville Cotton Mills (S. C.).....	175	175
Henrietta Mills (N. C.).....	160	175
Imman Mills (S. C.).....	104	108
Klug Mfg. Co. (Ga.).....	90	93
Lancaster Cotton Mills (S. C.).....	130	130
Lancaster Cot. Mills (S. C.) Pfd.....	97	100
Langley Mfg. Co. (S. C.).....	120	127
Laurens Mills (S. C.).....	127	127
Limestone Mills (S. C.).....	100	170
Lockhart Mills (S. C.).....	78	85
Lockhart Mills (S. C.) Pfd.....	99	100
Lorry Cotton Mills (N. C.) Pfd.....	95	97½
Marlboro Cotton Mills (S. C.).....	80	85
Mills Mfg. Co. (S. C.).....	102	102
Molloy Mfg. Co. (S. C.).....	105	110
Monaghan Mills (S. C.).....	109	112
Monarch Cotton Mills (S. C.).....	105	107
Newberry Cotton Mills (S. C.).....	125	130
Ninety-six Cotton Mills (S. C.).....	140	150
Norris Cotton Mills (S. C.).....	125	130
Olympia Cotton Mills (S. C.).....	90	90
Orin Cotton Mills (S. C.).....	121	140
Pacolet Mfg. Co. (S. C.).....	101	101
Pacolet Mfg. Co. (S. C.) Pfd.....	99	102
Pelzer Mfg. Co. (S. C.).....	169	169
Piedmont Mfg. Co. (S. C.).....	175	177
Poe Mfg. Co. (S. C.).....	170	180
Saxon Mills (S. C.).....	127	127
Sibley Mfg. Co. (Ga.).....	71	78
Spartan Mills (S. C.).....	131	140
Tifton Mfg. Co. (Ga.).....	130	140
Tucapau Mills (S. C.).....	300	300
Union Buffalo (S. C.) 1st Pfd.....	74	80
Union Buffalo (S. C.) 2d Pfd.....	17	25
Victor Mfg. Co. (S. C.).....	117	125
Warren Mfg. Co. (S. C.).....	107	107
Warren Mfg. Co. (S. C.) Pfd.....	106	110
Washington Mills (Va.) Pfd.....	108	110
Whitney Mfg. Co. (S. C.).....	135	135
Wiscasset Mills (N. C.).....	125	125
Woodruff Cotton Mills (S. C.).....	125	130
Woodside Cotton Mills (S. C.).....	105	110
Watts Mills (S. C.).....	95	100</

Ark., Waldo.—The People's Bank, capital \$25,000, is reported organized with J. M. Davis president, T. W. Callaway vice-president and M. D. Clark cashier. Business is to begin about September 1.

Fla., Lakeland.—The First National Bank, capital \$50,000, is reported to have been authorized to begin business; C. W. Deen, president; J. W. Bryant, vice-president, and C. M. Clayton, cashier. This is a conversion of the Citizens' Bank of Lakeland.

Fla., West Palm Beach.—The Currie Investment & Title Guaranty Co., capital \$100,000, has filed articles of incorporation. Geo. G. Currie will be president.

Ga., Uvalde.—The Bank of Uvalde is reported to have made application for a charter; capital \$25,000.

Ky., Lone Oak.—Press dispatches state that temporary organization of the Bank of Lone Oak has been completed with the election of officers thus: E. Furell, president, and Dr. J. Davis, secretary. The capital will be \$15,000.

Ky., Newport.—The Citizens' Commercial and Savings Bank is reported to have filed articles of incorporation; capital \$50,000; incorporators, Fred B. Bassman, Phil J. Veith, M. E. Purcell and Otto Wolff.

La., Opelousas.—Official: The Union Bank & Trust Co., incorporated; capital \$100,000. Joseph P. Saigan is president; Y. Andrepoint and O. Dardcan, vice-presidents; W. J. Sandoz, trust officer. Business is to begin about January 1, 1911.

La., Elton.—The People's Bank of Elton is reported to have begun business with directors thus: President, Dr. S. A. Pennington; vice-president, Wilber Putnam; cashier, E. S. Hart; Arthur Hollins of the Lake Charles National Bank, J. W. Lyman, Eunice, La.; G. W. Aylsworth and M. D. Southerland, Elton.

Md., Havre de Grace.—The Havre de Grace Banking & Trust Co. has begun business with \$25,000 capital and \$12,500 surplus. Officers: Isaac Hecht, president; Murray Vandiver, first vice-president; Joseph C. Parker, second vice-president, and A. Handlin Carver, secretary and treasurer.

Miss., Ethel.—The Bank of Ethel, capital \$30,000, incorporated by W. R. Pope, J. R. Riley, W. H. Hunter and others.

Mo., Joplin.—Official: The Missouri Miners' Casualty Co., incorporated; capital \$200,000; surplus \$75,000; incorporators, C. B. Gulim, S. K. Orth, C. E. Matthews, Thos. McCroskey, W. R. Caulkins, Ben C. Taylor, Chas. Schifferdecker, H. H. Clegg, D. D. Hong, H. C. Murphy, F. A. Wilber, John F. Wise, Pudd M. Robinson and Jerome B. Grigg. Business is to begin about September 1. A previous item gave the address as Jasper, Mo.

S. C., Anderson.—The Anderson County Loan & Investment Co. is to begin business August 6 with E. P. Vandiver, president; J. N. Blackley, vice-president; John Frank, secretary-treasurer.

S. C., Columbia.—The Richland Building and Loan Association is reported chartered with \$200,000 capital. Officers: Thos. S. Bryan, president; T. B. Anghtry, vice-president; William Barnwell, secretary and treasurer; W. D. Melton, solicitor.

Tenn., Campbellsville.—The Campbellsville Bank, capital \$15,000, is reported incorporated by J. J. Zucarello, R. N. Hayes, L. E. Farisley, S. T. Collins and Clarence Upshaw.

Tenn., Theta.—The Theta State Bank of Maury County, according to press reports, expects to begin business about September 1 with R. P. Dalton president, J. E. Trumble vice-president, J. S. Shapiro second vice-president and J. M. Fitzgerald cashier.

Tex., Cranfills Gap.—The First Guaranty State Bank, capital \$10,000, is reported to have begun business with officers thus: G. O. Bronstad, president; W. T. Tergerson, first vice-president; R. W. Ammons, second vice-president; O. A. Bronstad, cashier.

Tex., Del Rio.—The new State Bank & Trust Co., capital \$75,000, is reported to have elected directors thus: President, Will Whitehead; active vice-president, Sidney Turner; vice-president, John J. Foster; cashier, O. B. Franks; J. C. Clarkson, T. J. Ellis and James O. Taylor.

Tex., Jermyn.—The First State Bank of Jermyn, capital \$15,000, is reported organized by W. F. Suddeth of Abilene and others. Directors: Oliver Loving, president; John W. Carter, first vice-president; Will F. Suddeth, cashier; William Hannah, E. Hughes, W. H. Featherstone and W. P. Stuart.

Tex., Nordheim.—Official: The Nordheim State Bank is to be chartered with \$10,000 capital. Directors: H. J. Strunk, president; C. W. Gohmert, vice-president; F. O. A. Lader, cashier; Geo. Frende, Geo. Rode, M. G. Mueller and Aug. Tevier. Business is to begin August 1.

Tex., Port Lavaca.—The Calhoun County Building and Loan Association is reported organized with directors thus: A. D. Gibson, W. H. Mallory, J. B. Moore, E. F. Ehlinger and J. I. Cochran; A. D. Gibson, chairman.

Tex., Prairie Hill.—The Guaranty State Bank, capital \$10,000, is reported incorporated by T. N. Moody, J. B. Kirkpatrick, R. W. Henderson and others.

Tex., San Antonio.—Official: The Security Title & Guaranty Co., 201 East Houston St., began business July 1 with \$100,000 capital. Directors: Dr. R. M. Howe, president, and S. A. Coffman, both of San Antonio, Tex.; J. A. Witz, Indianapolis, Ind.; J. H. Mitchell, Cincinnati, O.; H. R. Follman, Lincoln, Neb., and E. J. Albert, St. Louis, Mo.

Tex., Sterling City.—The First National Bank of Sterling City has been authorized to begin business; capital \$60,000; W. L. Foster, president, and J. S. Cole, cashier.

Tex., Waco.—The Peerless Fire Insurance Co. of Waco is reported organized with \$500,000 capital and \$100,000 surplus. C. C. Beckley is acting secretary.

Va., Montvale.—Official: The Bedford County Bank chartered; capital \$100,000. Directors: S. H. Price, president; N. C. Luck and R. W. Peery, vice-presidents; R. A. Gilliam, cashier and secretary; C. C. Noell, H. A. Garrett, G. M. Arrington, L. H. Riley, B. H. Early, W. W. Hogan and T. W. Wilken. Business is to begin August 1.

NEW SECURITIES.

Ala., Hartselle.—August 8 an election is to be held to vote on \$28,000 of 6 per cent. 20-year water-works and electric-light bonds. Address J. H. Corshl, Mayor.

Ala., Linden.—An election will be held in Marengo county in September. It is reported to vote on \$200,000 of road-improvement bonds.

Ala., Montgomery.—July 25 an election is to be held to vote on \$25,000 of water and sewer bonds.

Ala., Montgomery.—Official: City is offering at private sale \$100,000 of 5 per cent. 20-year bonds for funding floating debts; denomination \$1000. Gaston Gunter is Mayor.

Ala., Opelika.—Reported voted: \$85,000 of bonds to take over public utilities.

Fla., Tarpon Springs.—Bids will be received until August 1 by the Board of Town Trustees, Dr. J. E. Douglas, chairman, for \$15,000 of 6 per cent. 10-20-year bonds.

Fla., White Springs.—Official: Election to vote on \$20,000 of water-works and sewerage bonds defeated. As soon as time expires, according to law, another election will be called, provision also being made for light plant, street and school building. Amount will probably be \$45,000. G. S. Mobley is Mayor.

Ga., Boston.—Bids will be received by E. C. Jones, clerk of the Board of Education, until August 1 for \$12,000 of 5 per cent. 20-year school bonds.

Ga., Carlton.—Reported voted: \$5000 of school-building bonds.

Ga., Dalton.—Bids will be received until 7 P. M. August 10 for \$125,000 of 5 per cent. municipal improvement bonds. Address Paul B. Trammell, Mayor.

Ga., Elberton.—Press dispatches say that \$25,000 of street-improvement bonds are under consideration.

Ga., Rockmart.—August 10 an election is to be held to vote on \$25,000 of water-works and \$10,000 of sewer 5 per cent. bonds. L. F. Mundy is Mayor, and P. M. Edwards, Clerk.

Ga., Toccoa.—August 9 an election is to be held to vote on \$19,000 of 5 per cent. 30-year sewerage bonds. John W. Owen is Mayor.

Md., Elton.—Reported defeated: \$75,000 of water, light and sewer bonds.

Miss., Amory.—Official: Bids will be received until 8 P. M. August 2 by J. P. Johnston, Mayor, for \$18,000 of 5 per cent. bonds for purchase of electric-light plant.

Miss., Belen.—Reported that Quitman county proposes issuing \$35,000 of courthouse and jail bonds. Address Board of Supervisors. I. C. Denton is clerk.

Miss., Brandon.—Reported that \$30,000 of Rankin county road bonds are to be issued.

Miss., Ellisville.—J. T. Taylor, Mayor, writes regarding proposed bond issue: "Nothing doing yet."

Miss., Meridian.—Reported that ordinances have been prepared providing for the issuing and sale of \$50,000 of drainage, \$10,000 of sewer, \$15,000 of fire-equipment and \$100,000 of school 6 per cent. 20-year bonds. J. W. Parker is Mayor, and C. W. O'Leary, Clerk.

Miss., Tupelo.—The People's Bank & Trust Co. of Tupelo is reported to have purchased the \$100,000 of 5½ per cent. Lee county road bonds.

Miss., Wiggins.—Press reports state that it is proposed to issue \$7500 of 6 per cent. street bonds.

Mo., Dexter.—An election will probably be held the middle of August to vote on between \$40,000 and \$50,000 of water-works and sewer bonds.

Mo., Malden.—Reported that \$30,000 of water and light improvement bonds were recently voted.

Mo., Slater.—Reported voted: \$27,500 of water and light bonds.

Mo., Windsor.—Reported voted: \$55,000 of water and sewer bonds.

N. C., Brevard.—Reported state that an election will probably be held in Transylvania county on August 2 to vote on \$10,000 of bonds in aid of the Greenville & Knoxville Railroad.

N. C., Elizabeth City.—Reports state that all bids received for the \$60,000 of 5 per cent. municipal bonds were rejected and new bids will be opened August 10. Z. Fearing is Mayor.

N. C., Franklinton.—Bids will be received by B. T. Green, secretary of Franklinton township, until 3 P. M. August 2 for \$30,000 of 5 per cent. 20-year road bonds.

N. C., Southern Pines.—J. S. Young of Vermont is reported to have purchased at 105:05 the \$20,000 of 6 per cent. 20-year refunding sewerage and water system bonds.

N. C., Town Creek.—August 16 an election is to be held. It is reported, to vote on \$15,000 of road bonds. W. H. Walker is register. Address Board of County Commissioners, Southport, N. C.

Okla., Hastings.—Reported that an election is to be held to vote on bonds for water-works system.

Okla., Yukon.—Official: Bids will be received at any time for \$40,000 of 6 per cent. 20-year water-works and sewer bonds voted June 27, 1910; denomination \$1000. H. T. Burson is Mayor.

S. C., Darlington.—Reported that a petition has been circulated among the residents of the town asking that an election be held to vote on \$20,000 of bonds for right of way for new railroad.

S. C., Ellerbe.—Reported that on July 22 an election will be held to vote on \$5000 of electric-light bonds.

S. C., Easley.—Reported that W. M. Hagood, chairman Board of Commissioners, will receive bids at any time for \$29,500 of 5 per cent. water and light bonds.

S. C., Florence.—J. Willard Ragsdale, president of the Farmers and Mechanics' Bank of Florence, is reported to have purchased at 101 the \$20,000 of 5 per cent. 30-year school-building bonds of Florence County School District No. 16.

S. C., Heath Springs.—Bids will be received until August 1 by F. M. Mobley, secretary Board of Trustees of Heath Springs School district No. 38, Lancaster county, for \$5000 of school bonds.

S. C., McColl.—Official: Bids will be opened August 15 by L. M. Morrison, clerk, for \$20,000 of 5 per cent. 20-year bonds for purchase of site and erection of school building; denomination \$1000; dated September 1, 1910.

S. C., Pageland.—Reported that \$5500 of 6 per cent. 30-year school district building bonds have been purchased by H. T. Holtz & Co. of Chicago.

S. C., Paxville.—An official letter says that the \$12,000 of 5½ per cent. school-building bonds offered July 15 were not sold; bonds mature 1940. Address Davis & Weinberg, Manning, S. C.

Tenn., St. Elmo.—Steps are being taken, according to press dispatches, to issue \$100,000 of public improvement bonds. W. S. Griscom is Mayor.

Tex., Aransas Pass.—Reported voted: \$20,000 of Aransas Pass independent school district bonds.

Tex., Austin.—The Attorney-General has approved the following securities: \$15,000 of fire apparatus and \$3500 of sewer 5 per cent. bonds of Tarkana; \$12,500 of 5 per cent. Hill county common school district bonds of district 98; \$10,000 of 5 per cent. series No. 5 Temple school building bonds; \$6000 of 4 per cent. 10-20-year Kates county bridge refunding bonds; \$1500 of district No. 18, \$2000 of district No. 19 and \$1200 of district No. 20 Randall county common school district bonds; \$750 of 5 per cent. 20-year Palo Pinto common school district No. 19 bonds; \$7000 of 5 per cent. 10-40-year Iredel independent school district bonds; \$150,000 of 5 per cent. 40-year bonds of Fort Bend county road district No. 1; \$3000 of 3 per cent. Fort Bend common school district bonds; \$1000 of 5 per cent. Rusk county common school district bonds.

Va., Big Stone Gap.—Reported that on November 22 an election is to be held to vote on \$70,000 of Wise county road bonds.

Tex., Bryan.—Official: Bids will be received until noon August 10 for \$33,000 of 1 per cent. 20-40-year water, light and sewer-plant bonds, dated May 1, 1909; denomination \$1000. Address J. T. Maloney, Mayor.

Tex., Mission.—Bids will be received until August 1 by G. L. Anderson, secretary Board of Education, for \$12,000 of 5 per cent. 10-40-year independent school district building bonds.

Tex., Seguin.—Official: Propositions received at once for the purchase of \$15,000 of school and \$25,000 of street 4½ per cent. 10-40-year bonds. Address the Mayor.

Tex., Sherman.—Reported that the State National Bank of Denison, Tex., has purchased at par and accrued interest \$250,000 of 4½ per cent. 40-year bonds of road district No. 1, Grayson county.

Va., Clifton Forge.—Reported that an ordinance has been prepared providing for \$65,000 of sewer, sidewalk, bridge, street and other improvement bonds.

Va., East Radford.—Bids will be received until July 28 by R. J. Noell, chairman finance committee, for \$15,000 of 5 per cent. 30-year school, street and refunding bonds.

Va., Lexington.—The sale of \$30,000 of 4 per cent. road and street-improvement bonds is reported ordered by the Town Council. Address The Mayor.

Va., Portsmouth.—Bids will be received until noon August 9 for \$75,000 of 5 per cent. 20-year bonds of Norfolk county for purchase of toll roads and bridges. Address Board of Supervisors, Alvah H. Martin, clerk.

Va., Wise.—Reported that an election is to be held November 22 to vote on \$700,000 of Wise county road bonds.

W. Va., Beckley.—Bids will be received by M. C. Brackman, City Recorder, until 6 P. M. July 28 for \$60,000 of 5 per cent. 20-30-year city bonds.

W. Va., Big Sandy.—J. R. Davis, secretary Board of Education of Big Sandy district, who is receiving bids until 2 P. M. August 1 for \$30,000 of 5 per cent. 10-34-year school bonds, should be addressed at Clendenin, W. Va., and not Big Sandy, as previously reported. The bonds are of \$1000 denomination each; dated September 1, 1910.

W. Va., Hamlin.—Lincoln county will, it is reported, hold an election in November to vote on \$100,000 of coal-tithe bonds.

W. Va., Keyser.—Official: Voted—\$30,000 of 5½ per cent. 10-24-year water-improvement bonds; denomination \$100 and multiples; dated September 1, 1910. Address R. A. Welch.

At Dalton, Ga., bids will be received until 7 P. M. August 10 for \$125,000 of 5 per cent. city bonds. Further particulars will be found in the advertising columns.

At Bryan, Tex., bids will be received until noon August 10 for \$33,000 of 4 per cent. 40-year water, light and sewer-plant bonds. Further particulars will be found in the advertising columns.

At Franklinton, N. C., bids will be received until 3 P. M. August 2 for \$30,000 of 5 per cent. 20-year Franklinton township road bonds. Further particulars will be found in the advertising columns.

At Portsmouth, Va., bids will be received until noon August 9 for \$75,000 of 5 per cent. Norfolk county bonds for purchase of toll roads and toll bridges. Further particulars will be found in the advertising columns.

FINANCIAL NOTES.

The Farmers and Merchants' Bank of Little Mountain, S. C., according to a dispatch, will increase its capital from \$10,000 to \$25,000.

The Bankers' Trust Co. of Houston, Tex., is reported to have voted to increase its capital from \$500,000 to \$1,000,000.

The Bank of Cotton Plant at Cotton Plant, Ark., has, according to a report, voted to change its name to the Cotton Plant Bank & Trust Co. and increase its capital from \$30,000 to \$50,000.

The Planters' Bank of Cotton Plant, Ark., is reported to have increased its capital from \$25,000 to \$75,000.

The twelfth annual convention of the South Carolina Fire Insurance Agents' Association was held at Columbia, S. C., July 14 and 15.

The Stewart Title Guaranty Co., with headquarters at Galveston, Tex., will, it is reported, open a branch at Dallas.

The Joplin Trust Co. of Joplin, Mo., according to press dispatches, has increased its capital from \$50,000 to \$250,000.

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